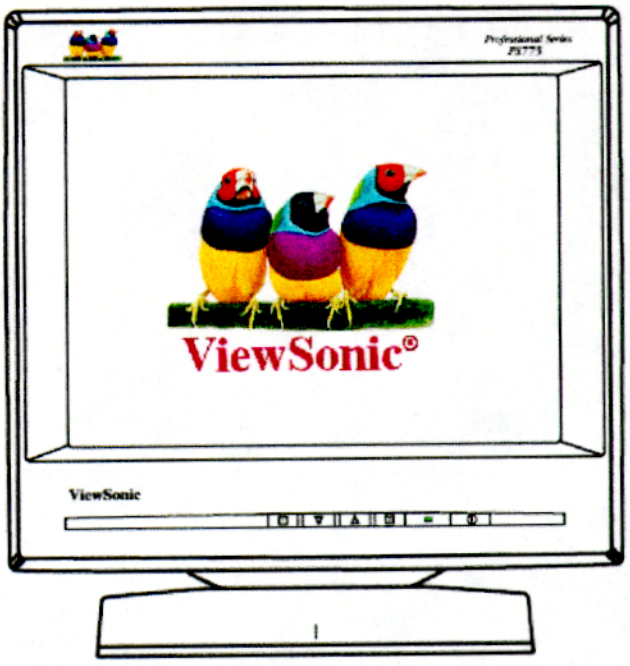
# Service Manual

## ViewSonic PS775

### Model No. VCDTS21419-1

***17" Digital Controlled Color Monitor***
***(16" viewable) Professional Series***

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# Revision History

| Revision | Date | Description Of Changes | Approval |
|---|---|---|---|
| 1.0 | 1/4/99 | Initial Issue | T. Sears |
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# TABLE OF CONTENTS


WARNING ..... 1

SAFETY PRECAUTIONS ..... 2

SPECIFICATIONS ..... 3~16

DIMENSIONS ..... 17~18

DISASSEMBLY INSTRUCTIONS ..... 19~21

NOTES FOR VIDEO PCB REPAIR ..... 22~23

CONTROL LOCATIONS ..... 24

ADJUSTMENT & SERVICE CAUTIONS ..... 25

ADJUSTMENT REQUIREMENTS ..... 26

ADJUSTMENT SOFTWARE ..... 27

ADJUSTMENT CONTROL LOCATION ..... 28

PARTS REPLACEMENT ADJUSTMENT PROCEDURES ..... 29

ADJUSTMENT PROCEDURE ..... 30~38

BLOCK DIAGRAM ..... 39~47

PCB LAYOUTS ..... 48~49

SCHEMATIC DIAGRAMS ..... 50~60

TROUBLESHOOTING GUIDE ..... 61~62

EXPLODED PARTS VIEW ..... 63

REPLACEMENT PARTS LIST ..... 64~75

# ⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.

It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.

Products powered by electricity should be serviced or repaired only by experienced professional technicians.

Any attempt to service or repair the product or products dealt within this service information by anyone else could result in serious injury or death.

# SAFETY PRECAUTIONS

## 1 CAUTION:

No modification of any circuit should be attempted. Service work should only be performed after you are thoroughly familiar with all of the following safety checks and servicing guide lines.

## 2 SAFETY CHECK

Care should be taken while servicing this CRT display because of the high voltage used in the deflection circuits. These voltages are exposed in such areas as the associated flyback and yoke circuits.

## 3 FIRE & SHOCK HAZARD

3-1 Insert an isolation transformer between the CRT display and AC power line before servicing the chassis.

3-2 In servicing pay attention to original lead dress especially in the high voltage circuit. If a short circuit is found, replace all parts which have been overheated as a result of the short circuit.

3-3 All the protective devices must be reinstalled per original design.

3-4 Soldering must be inspected for possible cold solder joints, frayed leads, damaged insulation, solder splashes or sharp solder points. Be certain to remove all foreign material.

## 4 LEAKAGE CURRENT COLD CHECK

4-1 Unplug the AC cord and connect a jumper between the two prongs on the plug.

4-2 Turn the CRT display power switch "on" .

4-3 Measure the resistance value with an ohmmeter between the jumpered AC plug and each exposed metallic part on the CRT display such as the metal frame, screwheads, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be 1.8 megohm minimum.

## 5 LEAKAGE CURRENT HOT CHECK

5-1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer during this check.

5-2 Connect a 1500 ohm, 10 watt resistor, paralleled by a 0.15μF capacitor between each exposed metallic part and a good earth ground (as shown in Fig.1).

5-3 Use an AC voltmeter with 1000 ohm/volt or more sensitivity and measure the AC voltage across the combination 1500 ohm resistor and 0.15μF capacitor.

5-4 Move the resistor connection to each exposed metallic part and measure the voltage.

5-5 Reverse the polarity of the AC plug in the AC outlet and repeat the above measurement.

5-6 Voltage measured must not exceed 7.5 volt RMS, from any exposed metallic part to ground A leakage current tester may be used in the above hot check, in which case any current measured must not exceed 5.0 milliamp. In the case of a measurement exceeding the 5.0 milliamp value, a rework is required to eliminate the chance of a shock hazard.

*Note: High voltage is present when this CRT display is operating. Always discharge the anode of the picture tube to the display chassis to prevent shock hazard.*

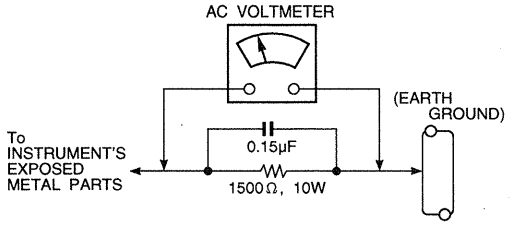



**Fig.1**

## 6 IMPLOSION PROTECTION

Picture tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage and scratching during installation. Use only Panasonic replacement picture tubes.

## 7 X-RADIATION

WARNING : The only potential source of X-Radiation is the picture tube. However when the high voltage circuitry is operating properly there is no possibility of X-Radiation problem. The basic precaution which must be exercised is to keep the high voltage at the following factory-recommended level.

*Note: It is important to use an accurate periodically calibrated high voltage meter.*

7-1 The procedure for adjustment high voltage is as shown on page 31.

7-2 If can not be adjust 25.0 kV at immediate service is required to prevent the possibility of premature component failure.

7-3 To prevent X-Radiation possibility it is essential to use the specified picture tube.

**IMPORTANT SAFETY NOTICE**

There are special components used in this CRT displays which are important for safety. These parts are identified by the international symbol ⚠ on the schematic diagram and on the replacement parts list. It is essential that these critical parts should be replaced with manufacture's specified parts to prevent X-RADIATION, shock, fire or other hazards. Do not modify the original design or this will void the original parts and labor guarantee.

# SPECIFICATION

## 1.0 SCOPE

### 1.1 Introduction

| | |
|---|---|
| Product Configuration | This specification defines the configuration and performance requirements for the following monitors: |
| North America | Model Name **PS775**<br>Model Number **VCDTS21419-1M** |
| Europe | Model Name **PS775**<br>Model Number **VCDTS21419-1E** |
| Australia | Model Name **PS775**<br>Model Number **VCDTS21419-1A**<br>**[Future Expansion]** |
| Pacific | Model Name **PS775**<br>Model Number **VCDTS21419-1P** |

### 1.2 Product Definition

| | |
|---|---|
| Top Level Assembly | The top level assembly shall contain the following:<br>1. Monitor<br>2. USB Tilt/Swivel Base<br>3. USB Cable<br>4. Power Cable(s)<br>5. Video Cable<br>6. User's Guide<br>7. VS CDRom<br>8. Warranty Card |

### 1.3 Magnetic Requirements

| | |
|---|---|
| PS775-1M/-1E/-1P | $B_h = 250 \pm 10$ mG, $B_v = 450 \pm 10$ mG |
| PS775-1A | $B_h = 270 \pm 10$ mG, $B_v = -570 \pm 10$ mG |

## 2.0 GENERAL REQUIREMENTS

### 2.1 General Specifications

| | |
|---|---|
| Warm Up | Video performance shall be measured after a warm up period of **30** minutes. |
| Vertical Magnetic Field | The Vertical Magnetic Field specified in paragraph 1.3 shall be used for all video evaluation. |
| Horizontal Magnetic Field | **0mG** shall be used for all video evaluation unless otherwise specified. |
| Test Resolution & Frequency | Factory Presets. |
| Test Image Size | Factory Default. |
| Contrast and Brightness Controls | Factory Default. |

## 3.0 VIDEO INTERFACE

3.1 Video Interface

| | |
|---|---|
| Video Connections | **DB-15**<br>**BNC x 5** |
| Default Input Connector | DB-15 |
| Video Cable Length | 1.8 meters (Typ) |
| Video Cable Color | Light Gray |
| Video Cable Strain Relief | 10kG for one minute |
| Video Cable Connector DB-15 Pinout | Compliant with IBM 8513 and VESA DDC 1/2B. |
| Video Cable BNC Connectors | Red, Green (Sync on Green), Blue, Horizontal Sync (Horizontal/Vertical), and Vertical Sync. |
| Video Signals | 700 mV full scale, 1,000 mV full scale |
| Video Impedance | 75 Ohms |
| Maximum PC Video Signal | 950 mV with no damage to monitor |
| Maximum Mac Video Signal | 1250 mV with no damage to monitor |
| Sync Signals | TTL Compliance + CMOS Gate |
| DDC 1/2B | Compliant with Revision 2.1 |
| Sync Compatibility | Separate Sync<br>Sync on Green<br>Composite Sync. |
| Video Compatibility | The monitor shall be compatible with all PC type computers, MacIntosh computers, and after market TBD video cards. |

## 4.0 POWER

4.1 Power Supply

| | |
|---|---|
| Input Voltage Range | 90 - 264 VAC |
| Input Frequency Range | 50 +/- 3Hz, 60 +/- 3 Hz |
| Fuse | Internal and not user replaceable |
| Power Dissipation – typical | 120 W w/o USB |
| Power Dissipation - maximum | 135 W |
| Power Supply Inrush | < 40 amperes for ½ cycle |
| Power Supply Degauss | The monitor shall degauss when powered on. |

4.2 Power Interface / Connector

| | |
|---|---|
| Monitor Connector | IEC-320 (10A) type male power receptacle. |
| Power Cable Length | 1.8 meter (typ) |
| Power Cable Color | Gray |
| "-M" Model, | 3-prong NEMA 5-15P type plug |
| "-E" Model | Schuko CEE7-7, L = 1.8m (typ) |

| | |
|---|---|
| "-A" / "-P" Model | 3-prong NEMA 5-15P type plug<br>PC Type Power Cable |
| USB Base Power Connector | IEC-320 (10A) type male power receptacle. |
| Non-Detachable Power Cable to Monitor | 0.65m (typ), from USB Base |
| Non-detachable Power Cable Color | Light Gray |
| 4.3 Power Saving Operation | |
| Method | VESA DPMS Signaling |
| Power Consumption | ON Mode < 120W (w/o USB)<br>STAND BY < 15 Watts<br>SUSPEND < 15 Watts<br>OFF < 3 Watts |
| Recovery Time | ON Mode = N/A<br>STAND BY < 4 sec<br>SUSPEND < 4 sec<br>OFF < 20 sec |

## 5.0 FRONT PANEL CONTROLS AND INDICATORS

5.1 Front Panel Hardware Controls

| | |
|---|---|
| Power Switch | Mechanical |
| Power LED | Green – ON<br>Orange – DPMS Standby<br>Orange – DPMS Suspend<br>Orange – DPMS Off |
| 5.2 Video Controls | |
| Control Type | Digital with OSD |
| OSD Controls | |
| Contrast<br>Zoom<br>H. Size<br>V. Size<br>V. Pincushion<br>V. Pin Balance<br>Parallogram<br>Tilt<br>Degauss<br>Memory Recall<br>OSD Position<br>Input Level Select | Brightness<br>H. Position<br>V. Position<br>Hooking<br>Trapezoid<br>H. Moire<br>V. Moire<br>ViewMeter<br>OSD Language {Ger, Fr, Eng, Ita, Spa}<br>ViewMatch Color<br>Input Select |
| | The OSD shall save new settings when it is turned off the by the user or when it times out. There shall not be a separate save. |

## 6.0 ELECTRICAL REQUIREMENTS

### 6.1 Horizontal / Vertical Frequency

| | |
|---|---|
| Horizontal Scan Range | 30 kHz ~ 97 kHz |
| Vertical Refresh Rate | 50 Hz ~ 180 Hz |
| Sync Polarity | Independent of sync polarity. |

### 6.2 Primary Preset

| | |
|---|---|
| Primary Aligned Preset # 1. (Mode 1) | VESA 1024 x 768 @ 75Hz |

### 6.3 Other Factory Presets

| | |
|---|---|
| Mode 2 | VGA 640 x 480 @ 60Hz |
| Mode 3 | VESA 800 x 600 @ 85Hz |
| Mode 4 | MAC 832 x 624 @ 75Hz |
| Mode 5 | VESA 1024 x 768 @ 85Hz |
| Mode 6 | VESA 640 x 480 @ 75Hz |
| Mode 7 | VESA 800 x 600 @ 75Hz |
| Mode 8 | VESA 1280 x 1024 @ 75Hz |
| Mode 9 (Fixed Parameter, Not checked) | IND VGA 640 x 400 @ 70Hz |
| Mode 10 (Fixed Parameter, Not checked) | IND VGA 640 x 350 @ 70Hz |

### 6.4 User Presets

| | |
|---|---|
| Number of User Presets Available | 11 |

### 6.5 Changing Modes

| | |
|---|---|
| Maximum Mode Change Time | < 3 Sec (max) |
| Mode Change Image | The image shall blank while the monitor changes modes. |

### 6.6 USB Base

| | | |
|---|---|---|
| USB Spec | | Rev 1.0 Compliant |
| Input Signal | | Low Speed / High Speed |
| Connector | **Upstream** | Receptacle series type B x 1 |
| | **Downstream** | Receptacle series type A x 4 |
| | **Power In** | 3 pin Inlet (CEE22) |
| | **Power Out** | Universal Power Cord (Non-Detachable) |
| Power | | 18W Max |
| USB Cable | | L = 1.8m (typ) |

## 7.0 CATHODE RAY TUBE

### 7.1 Cathode Ray Tube

| | |
|---|---|
| CRT | MEC M41LJV007X |
| Size | 17" (16.0" Viewable Screen Area) |
| Diagonal | 406.4mm |
| Mask Type | Invar Shadow Mask |
| Phosphor Pitch<br>Mask Pitch | 0.25mm (H=0.22mm, V=0.13mm)<br>0.24mm |
| Faceplate Treatment | Advanced AGRAS Coating |
| Transmission Percentage | 48% |
| Implosion Protection | The CRT shall have implosion protection and will meet the requirements of UL-1418 and IEC-65. |

## 8.0 IMAGE PERFORMANCE

### 8.1 Factory Defaults

| | |
|---|---|
| Preset Color | 9300K + 8MPCD |
| Contrast Control | Maximum |
| Brightness Control | Raster Just Extinguished<br>(OSD Indicator = 50) |
| 8.2 Display Size | |
| Horizontal Size, Primary Preset | **310** mm +/- **5**mm |
| Horizontal Size, Other Presets (4:3) | **310** mm +/- **7** mm |
| Horizontal Size, Other Presets (5:4) | **290** mm **+/- 7** |
| Vertical Display Size, Primary Preset | **232** mm +/- **5** mm |
| Vertical Display Size, Other Presets (4:3) | **232** mm +/- **7** mm |
| Vertical Display Size, Other Presets (5:4) | **232** mm +/- **7** mm |
| Display Size Adjustment | All modes shall be capable of expanding to full screen size via OSD. |
| 8.3 Display Centering Requirements | |
| Horizontal, Primary Preset | **4** mm, correctable to zero |
| Horizontal, Other Presets | **7** mm, correctable to zero |
| Vertical, Primary Preset | **4** mm, correctable to zero |
| Vertical, Other Presets | **7** mm, correctable to zero |

| | |
|---|---|
| 8.4 Raster Linearity | |
| Linearity Equation | $\frac{Hi - Low}{(Hi + Low)} \times 100\% \leq XX\%$ |
| Horizontal, Worst Case | **5 %** with 16(H) x 12(V) Grid<br>**6 %** at VGA Mode |
| Vertical, Worst Case | **5 %** with 16(H) x 12(V) Grid<br>**6%** at VGA Mode |
| 8.5 Trapezoid Distortion | |
| Horizontal, \|AB - CD\| | Specified as total Geometry box in paragraph 8.11 |
| Vertical, \|AC - BD\| | Specified as total Geometry box in paragraph 8.11 |
| 8.6 Parallelogram Distortion | |
| \|AD - BC\| | Specified as total Geometry box in paragraph 8.11 |
| 8.7 Orthogonality | |
| Orthogonality | 1.0 degrees |
| 8.8 Line Straightness Requirements | |
| Line Straightness | No visible hooks or S-curve distortion. |
| 8.9 Jitter | |
| Jitter | 0.1 mm or Invisible at a distance of 60cm from CRT surface. |
| 8.10 Tilt / Rotation | |
| Vertical Field, Paragraph 1.3. Zero, North, South, East, & West Horizontal Field, Paragraph 1.3 | 2.0 mm, adjustable to zero |
| 8.11 2.0mm Box (Total Geometric Error) | |
| Top | 2.0mm |
| Bottom | 2.0mm |
| Left | 2.0mm |
| Right | 2.0mm |

| | |
|---|---|
| 8.12 Focus / Moire | |
| Focus | Focus shall be clear, crisp, and sharp over the entire surface of the CRT. |
| Crosshatch Moire | Crosshatch Moire and focus shall be controlled to give consistent moire performance from unit to unit. |
| 8.13 Convergence | |
| A Zone (circle w/ d=232) | 0.30 mm |
| B Zone (310mm x 232mm) | 0.40 mm |
| 8.14 Image Regulation | |
| Static with Luminance | 2.0 mm max |
| Dynamic with Luminance | 2.0 mm max |
| Temperature | 1.5% of line length (20C +/- 15C) |
| Line Voltage | 0.5% of line length |
| 8.15 Preset Color Temperatures | |
| 9300K + 8 M. P. C. D. | X = 0.283 +/- 0.020, y = 0.298 +/- 0.020 |
| 7500K | x = 0.300 (Typ), y = 0.315 (Typ) |
| 6500K | x = 0.313 (Typ), y = 0.329 (Typ) |
| 5000K | x = 0.346 (Typ), y = 0.359 (Typ) |
| 8.16 CRT Color Uniformity | |
| 1931 CIE "x" worst case variation | $\lvert x_{max} - x_{min} \rvert < 0.015$ |
| 1931 CIE "y" worst case variation | $\lvert y_{max} - y_{min} \rvert < 0.015$ |
| 8.17 Video Amplifier Linearity, Input Step | |
| 1931 CIE "x" 600 mv to 700 mv change | $\lvert x_{600\ mv} - x_{700\ mv} \rvert < 0.010$ |
| 1931 CIE "y" 600 mv to 700 mv change | $\lvert y_{600\ mv} - y_{700\ mv} \rvert < 0.010$ |
| 8.18 Video Amplifier Linearity, Input Voltage or Contrast Control | |
| 1931 CIE "x" change with input voltage or contrast control. | $\lvert x_{25.75\ Ft\text{-}L} - x_{10\ Ft\text{-}L} \rvert < 0.010$<br>$\lvert x_{25.75\ Ft\text{-}L} - x_{30\ Ft\text{-}L} \rvert < 0.010$ |
| 1931 CIE "y" change with input voltage or contrast control. | $\lvert y_{25.75\ Ft\text{-}L} - y_{10\ Ft\text{-}L} \rvert < 0.010$<br>$\lvert y_{25.75\ Ft\text{-}L} - y_{30\ Ft\text{-}L} \rvert < 0.010$ |
| 8.19 Purity | |
| Vertical Field, Paragraph 1.3. Zero, North, South, East, & West Horizontal Field, Paragraph 1.3 | No visible impingement – Full scan flat Red, Green & Blue fields.<br>Uniform full scan flat white field. |

| | |
|---|---|
| 8.20 Luminance Level | |
| Luminance Level<br>(Primary Preset and 9300 K only) | 103 cd/m2 (min) Cont = Max, Br = 50<br>110 cd/m2 (typ) Cont = Max, Br = 50<br>Center measurement at 100% White Field. |
| Luminance Level<br>(Primary Preset and 9300 K only) | 135 cd/m2 (Min) Cont = Max, Br = 50<br>Center measruement at 5% White Field. |
| Luminance Level<br>(Primary Preset and 9300 K only) | 17 cd/m2 (Max) Cont = Min, Br = 50<br>Center measurement at 100% White Field |
| Luminance Level<br>(Primary Preset and 9300 K only) | Blank raster with Cont = Max, Br = 50<br>Center measurement with no active video. |
| 8.21 Luminance Uniformity | |
| Luminance Uniformity (Primary Preset) | >75% |
| 8.22 Front of Screen Bandwidth | |
| Primary Preset | 22 dB |
| 8.23 Video Cards | |
| Optimized Video Performance | Matrox Millenium G100/G200 Chipset |
| Acceptable Video Performance | ATI, Diamond Stealth Series |
| 8.24 Raster Artifacts | |
| Video Artifacts | No Visible Peaking, Ringing, Streaking, Sag, or Smearing Artifacts when driven by the specified video cards in any video mode within the horizontal or vertical frequency range of the monitor |
| Video Skew | No Visible Complimentary Color Transition Artifacts in any video mode within the horizontal or vertical frequency range of the monitor. |
| Deflection, Power Supply, and Grounding Artifacts | No visible artifacts in any specified video mode within the horizontal or vertical frequency range of the monitor |

## 9.0 MECHANICAL

### 9.1 Bezel Opening

| | |
|---|---|
| Diagonal Bezel Opening | **406.4** mm |

### 9.2 Dimensions

| | |
|---|---|
| Width | 410 mm |
| Height | 433.5 mm |
| Depth | 385 mm |
| Base Size | 287mm x 255mm |
| Monitor Weight | 18.0 kg |

### 9.3 Tilt / Swivel

| | |
|---|---|
| Up | 13 degrees |
| Down | 4 degrees |
| Right | 90 degrees |
| Left | 90 degrees |

## 10.0 ENVIRONMENTAL

### 10.1 Environmental Conditions

| | |
|---|---|
| Operating Temperature | 5°C to +35°C |
| Storage Temperature | -20°C to +60°C |
| Operating Relative Humidity | 5% to 90% Non-Condensing |
| Storage Relative Humidity | 5% to 90% Non-Condensing |
| Operating Altitude | +3000 meters (Max) |
| Storage Altitude | +12000 meters (Max) |

## 11.0 PACKAGING

### 11.1 Package Specifications

| | |
|---|---|
| Width | 537 mm |
| Height | 539 mm |
| Depth | 491 mm |
| Gross Weight | 22.0 kg |

## 12.0 REGULATORY AND SAFETY:

12.1 North America

| Regulatory Filing | Regulatory filing should be made under the "VCDTS21419-XY" |
|---|---|
| | UL1950<br>DHHS Part 21, Subpart J<br>FCC, Part 15, Subpart J, Subpart B<br>CSA 22.2 No. 950-M1989<br>DOC, ICES-003, Class B<br>NOM (Applied by VSA)<br>Energy Star {Applied by VSA} |
| 12.2 International | |
| | CE<br>TCO 95<br>TUV Ergo / MPR II<br>TUV GS<br>ROV<br>NEMKO<br>DEMKO<br>SEMKO<br>FIMKO<br>B-Mark {Applied by VSE}<br>PCT<br>Lituania {Applied by VSE}<br>Estonia {Applied by VSE}<br>SASO {Applied by VSE}<br>VCCI<br>BCIQ<br>CCIB<br>S-Mark {Applied by VSI}<br>C-Tick<br>CB Test Report<br>Energy 2000 {Applied by VSA} |
| 12.4 Power Management | |
| Power Management | Energy Star® (Applied by VSA) |

## 13.0 VIDEO COMMUNICATIONS

| | |
|---|---|
| 13.1 EDID Standard and Structure | |
| EDID File Format | VESA's EDID Structure Version #1, Revision #1. |
| 13.2 EDID Vendor Name | |
| EDID VENDOR NAME | VSC: Byte 8 - 5Ah, Byte 9 – 63h. |
| 13.3 EDID PRODUCT ID | |
| EDID PRODUCT ID | 'DD' = Byte 10 – 0x**44**h, Byte 11 – 0x**44**h |
| 13.6 USB | |
| USB | 1. A High Speed Active (one upstream port and four downstream ports) Hub shall be included in the base.<br>2. The USB cable supplied with the unit shall be 1.8 meters (typ) long.<br>3. USB is not Compatible with a HOSD. |

## 14.0 CODING ASSIGNMENT

14.1 Product Name and Model Number

| | |
|---|---|
| Product Name | ViewSonic PS775 |
| North America<br>Europe<br>Australia [Future Expansion]<br>Pacific | Model Number: **VCDTS21419-1M**<br>Model Number: **VCDTS21419-1E**<br>Model Number: **VCDTS21419-1A**<br>Model Number: **VCDTS21419-1P** |
| 14.2 Serial Number Format | |
| Format | PPYWWnnnnn where<br>PP = Regional Product ID Code<br>Y = Last digit of manufacturing year<br>WW = Manufacturing week<br>nnnnn = Production sequence number (Assigned by factory) |
| 14.3 Regional Product ID Code | |
| North America | ID Code: **DD** |
| Europe | ID Code: **FD** |
| Australia | ID Code: **TBD** |
| Pacific | ID Code: **HD** |

| 14.4 UPC Coding | |
|---|---|
| North America | UPC Code: **766907 10411 0** |
| Europe | UPC Code: **766907 11411 9** |
| Australia | UPC Code: **TBD** |
| Pacific | UPC Code: **766907 12411 8** |
| 14.5 FCC ID Code | |
| FCC ID | **GSS17027** |

14.6 EDID data

**Extended Display Identification Data (EDID)**

**ViewSoinc PS775**

| | | |
|---|---|---|
| | ID Manufacturer Name | **VSC** |
| | ID Product Code | **0x44, 0x44** |
| | ID Serial Number | [nnnnn] |
| | Week of Manufacture | [As Defined] |
| | Year of Manufacture | [As Defined] |
| | EDID Version.Revision | Ver 1.1 |
| SIGNAL | Level | ☒ 0.700V / 0.300V<br>☐ 0.714V / 0.286V<br>☐ 1.000V / 0.400V |
| SIGNAL | Input | Analog |
| SIGNAL | Setup | ☐ YES ☒ NO |
| SIGNAL | Inputs | ☒ Separate Sync<br>☒ Composite Sync<br>☒ Sync on Green |
| SIGNAL | Serration of V | ☐ YES ☒ NO |
| | Max. H. Image Size | 32 cm |
| | Max V. Image Size | 24 cm |
| | Gamma | 2.87 |
| | DPMS | ☒ Stand-By<br>☒ Suspend<br>☒ Off |
| | Display Type | ☐ Mono / Gray<br>☒ RGB Color<br>☐ Non-RGB Multicolor |
| COLOR | Red | x: 0.635 y: 0.333 |
| COLOR | Green | x: 0.285 y: 0.605 |
| COLOR | Blue | x: 0.152 y: 0.068 |
| COLOR | White | x: 0.283 y: 0.298 |

EDID S/N Must Match with Physical S/N

# TIMING CHART

| | |
|---|---|
| A | Period |
| B | Blanking |
| C | Sync Width |
| D | Back Porch |
| E | Active |
| F | Front Potch |

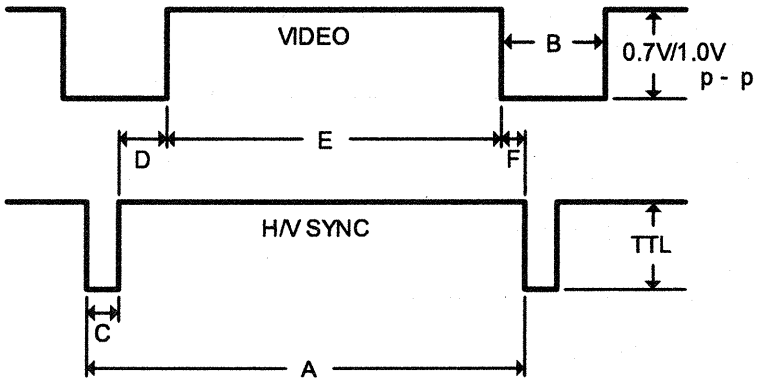



Fig.1

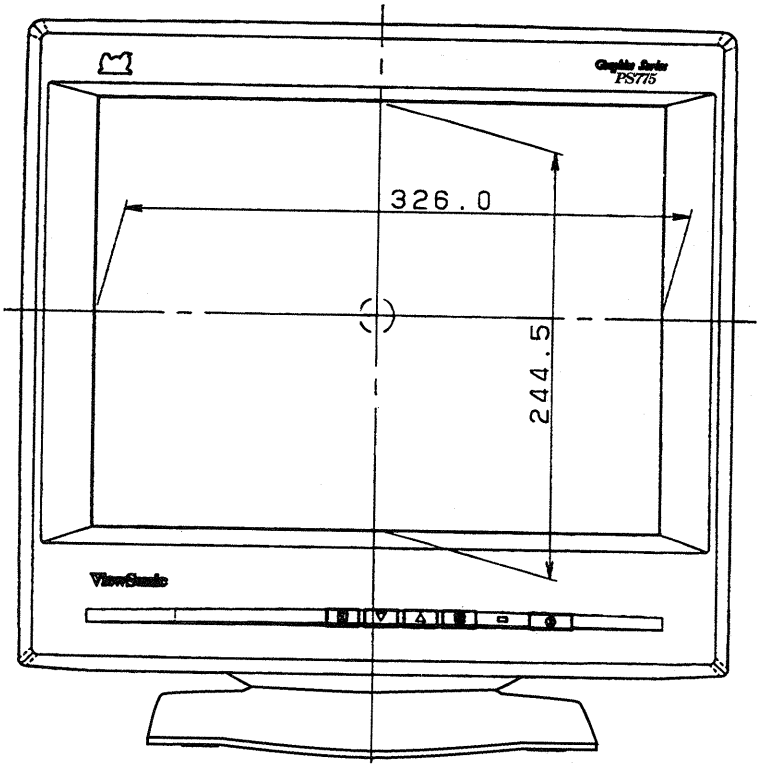
| | | PRESET | RESERVATION | RESERVATION |
|---|---|---|---|---|
| | | MODE - 1 | MODE - 2 | MODE - 3 |
| | | 1024 × 768 (75) | 640 × 480 (60) | 640 × 480 (75) |
| | DOT CLOCK | 78.7500 MHz | 25.1745 MHz | 31.5000 MHz |
| H | f H | 60.0229 kHz | 31.4681 kHz | 37.5000 kHz |
| H | A - PERIOD | 16.660 µs ( 1,312 dots ) | 31.778 µs ( 800 dots ) | 26.667 µs ( 840 dots ) |
| H | B - BLANKING TIME | 3.657 µs ( 288 dots ) | 6.356 µs ( 160 dots ) | 6.349 µs ( 200 dots ) |
| H | C - SYNC WIDTH | 1.219 µs ( 96 dots ) | 3.813 µs ( 96 dots ) | 2.032 µs ( 64 dots ) |
| H | D - BACK PORCH | 2.235 µs ( 176 dots ) | 1.907 µs ( 48 dots ) | 3.810 µs ( 120 dots ) |
| H | E - ACTIVE TIME | 13.003 µs ( 1,024 dots ) | 25.423 µs ( 640 dots ) | 20.317 µs ( 640 dots ) |
| H | F - FRONT PORCH | 0.203 µs ( 16 dots ) | 0.636 µs ( 16 dots ) | 0.508 µs ( 16 dots ) |
| V | f V | 75.0286 Hz | 59.9393 Hz | 75.0000 Hz |
| V | A - PERIOD | 13.328 ms ( 800 lines ) | 16.684 ms ( 525 lines ) | 13.333 ms ( 500 lines ) |
| V | B - BLANKING TIME | 0.533 ms ( 32 lines ) | 1.430 ms ( 45 lines ) | 0.533 ms ( 20 lines ) |
| V | C - SYNC WIDTH | 0.050 ms ( 3 lines ) | 0.064 ms ( 2 lines ) | 0.080 ms ( 3 lines ) |
| V | D - BACK PORCH | 0.466 ms ( 28 lines ) | 1.049 ms ( 33 lines ) | 0.427 ms ( 16 lines ) |
| V | E - ACTIVE TIME | 12.795 ms ( 768 lines ) | 15.254 ms ( 480 lines ) | 12.800 ms ( 480 lines ) |
| V | F - FRONT PORCH | 0.017 ms ( 1 lines ) | 0.318 ms ( 10 lines ) | 0.027 ms ( 1 lines ) |
| | SYNC POLARITY(H/V) | Positive / Positive | Negative / Negative | Negative / Negative |

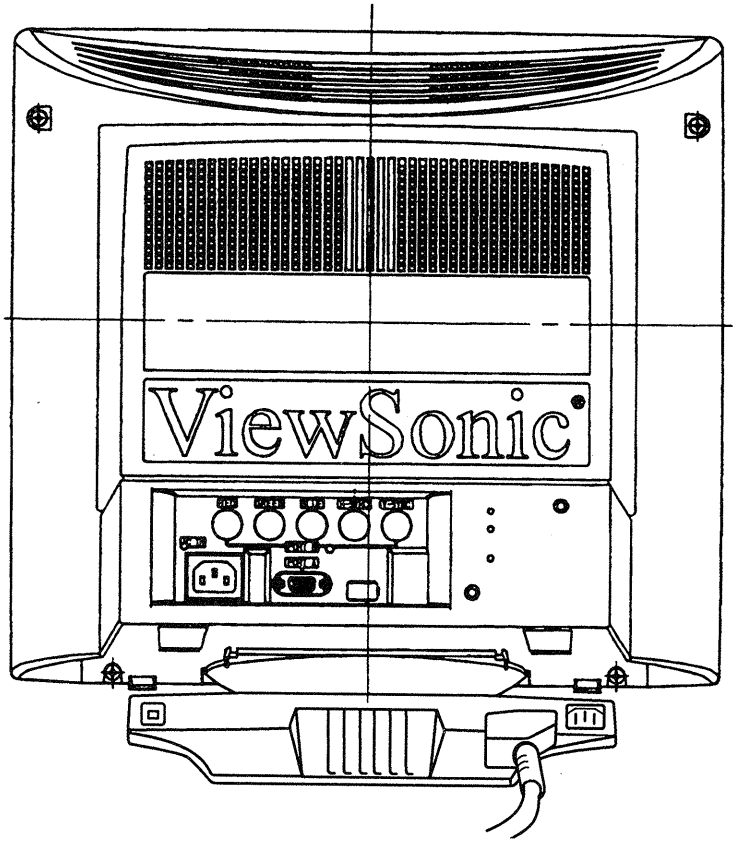
| | | RESERVATION | RESERVATION | RESERVATION |
|---|---|---|---|---|
| | | MODE - 4 | MODE - 5 | MODE - 6 |
| | | 800 × 600 (75) | 800 × 600 (85) | MAC 832 × 624 |
| | DOT CLOCK | 49.5000 MHz | 56.2500 MHz | 57.2832 MHz |
| H | f H | 46.8750 kHz | 53.6737 kHz | 49.7250 kHz |
| H | A - PERIOD | 21.333 µs ( 1,056 dots ) | 18.631 µs ( 1,048 dots ) | 20.111 µs ( 1,152 dots ) |
| H | B - BLANKING TIME | 5.172 µs ( 256 dots ) | 4.409 µs ( 248 dots ) | 5.586 µs ( 320 dots ) |
| H | C - SYNC WIDTH | 1.616 µs ( 80 dots ) | 1.138 µs ( 64 dots ) | 1.117 µs ( 64 dots ) |
| H | D - BACK PORCH | 3.232 µs ( 160 dots ) | 2.702 µs ( 152 dots ) | 3.910 µs ( 224 dots ) |
| H | E - ACTIVE TIME | 16.162 µs ( 800 dots ) | 14.222 µs ( 800 dots ) | 14.524 µs ( 832 dots ) |
| H | F - FRONT PORCH | 0.323 µs ( 16 dots ) | 0.569 µs ( 32 dots ) | 0.559 µs ( 32 dots ) |
| V | f V | 75.0000 Hz | 85.0613 Hz | 74.5502 Hz |
| V | A - PERIOD | 13.333 ms ( 625 lines ) | 11.756 ms ( 631 lines ) | 13.414 ms ( 667 lines ) |
| V | B - BLANKING TIME | 0.533 ms ( 25 lines ) | 0.578 ms ( 31 lines ) | 0.865 ms ( 43 lines ) |
| V | C - SYNC WIDTH | 0.064 ms ( 3 lines ) | 0.056 ms ( 3 lines ) | 0.060 ms ( 3 lines ) |
| V | D - BACK PORCH | 0.448 ms ( 21 lines ) | 0.503 ms ( 27 lines ) | 0.784 ms ( 39 lines ) |
| V | E - ACTIVE TIME | 12.800 ms ( 600 lines ) | 11.179 ms ( 600 lines ) | 12.549 ms ( 624 lines ) |
| V | F - FRONT PORCH | 0.021 ms ( 1 lines ) | 0.019 ms ( 1 lines ) | 0.020 ms ( 1 lines ) |
| | SYNC POLARITY(H/V) | Positive / Positive | Positive / Positive | Negative / Negative |

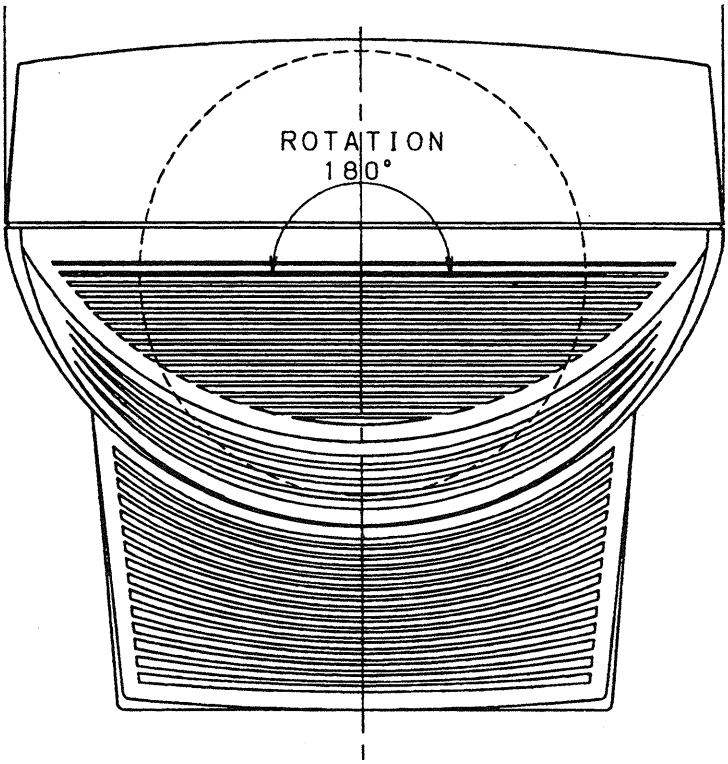
| | | RESERVATION | RESERVATION | |
|---|---|---|---|---|
| | | MODE - 7 | MODE - 8 | MODE - 9 |
| | | 1024 × 768 (85) | 1280 × 1024 (75) | 640 × 400 (70) |
| DOT CLOCK | | 94.5000 MHz | 135.0000 MHz | 25.1745 MHz |
| H | f H | 68.6773 kHz | 79.9763 kHz | 31.4681 kHz |
| | A - PERIOD | 14.561 µs ( 1,376 dots ) | 12.504 µs ( 1,688 dots ) | 31.778 µs ( 800 dots ) |
| | B - BLANKING TIME | 3.725 µs ( 352 dots ) | 3.022 µs ( 408 dots ) | 6.356 µs ( 160 dots ) |
| | C - SYNC WIDTH | 1.016 µs ( 96 dots ) | 1.067 µs ( 144 dots ) | 3.813 µs ( 96 dots ) |
| | D - BACK PORCH | 2.201 µs ( 208 dots ) | 1.837 µs ( 248 dots ) | 1.907 µs ( 48 dots ) |
| | E - ACTIVE TIME | 10.836 µs ( 1,024 dots ) | 9.481 µs ( 1,280 dots ) | 25.423 µs ( 640 dots ) |
| | F - FRONT PORCH | 0.508 µs ( 48 dots ) | 0.119 µs ( 16 dots ) | 0.636 µs ( 16 dots ) |
| V | f V | 84.9967 Hz | 75.0247 Hz | 70.0849 Hz |
| | A - PERIOD | 11.765 ms ( 808 lines ) | 13.329 ms ( 1,066 lines ) | 14.268 ms ( 449 lines ) |
| | B - BLANKING TIME | 0.582 ms ( 40 lines ) | 0.525 ms ( 42 lines ) | 1.557 ms ( 49 lines ) |
| | C - SYNC WIDTH | 0.044 ms ( 3 lines ) | 0.038 ms ( 3 lines ) | 0.064 ms ( 2 lines ) |
| | D - BACK PORCH | 0.524 ms ( 36 lines ) | 0.475 ms ( 38 lines ) | 1.112 ms ( 35 lines ) |
| | E - ACTIVE TIME | 11.183 ms ( 768 lines ) | 12.804 ms ( 1,024 lines ) | 12.711 ms ( 400 lines ) |
| | F - FRONT PORCH | 0.015 ms ( 1 lines ) | 0.013 ms ( 1 lines ) | 0.381 ms ( 12 lines ) |
| SYNC POLARITY(H/V) | | Positive / Positive | Positive / Positive | Negative / Positive |

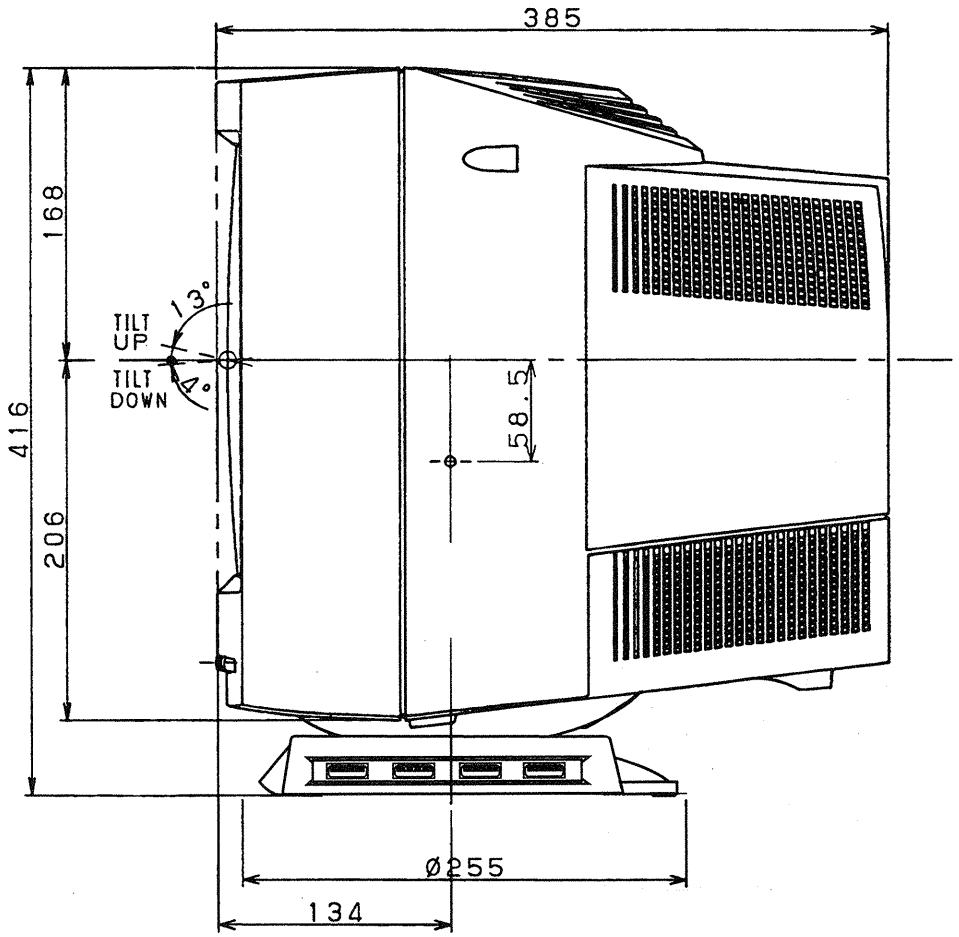
| | | MODE - 10 |
|---|---|---|
| | | 640 × 350 (70) |
| DOT CLOCK | | 25.1745 MHz |
| H | f H | 31.4681 kHz |
| | A - PERIOD | 31.778 µs ( 800 dots ) |
| | B - BLANKING TIME | 6.356 µs ( 160 dots ) |
| | C - SYNC WIDTH | 3.813 µs ( 96 dots ) |
| | D - BACK PORCH | 1.907 µs ( 48 dots ) |
| | E - ACTIVE TIME | 25.423 µs ( 640 dots ) |
| | F - FRONT PORCH | 0.636 µs ( 16 dots ) |
| V | f V | 70.0849 Hz |
| | A - PERIOD | 14.268 ms ( 449 lines ) |
| | B - BLANKING TIME | 3.146 ms ( 99 lines ) |
| | C - SYNC WIDTH | 0.064 ms ( 2 lines ) |
| | D - BACK PORCH | 1.907 ms ( 60 lines ) |
| | E - ACTIVE TIME | 11.122 ms ( 350 lines ) |
| | F - FRONT PORCH | 1.176 ms ( 37 lines ) |
| SYNC POLARITY(H/V) | | Positive / Negative |

# DIMENSIONS




ROTATION
180°

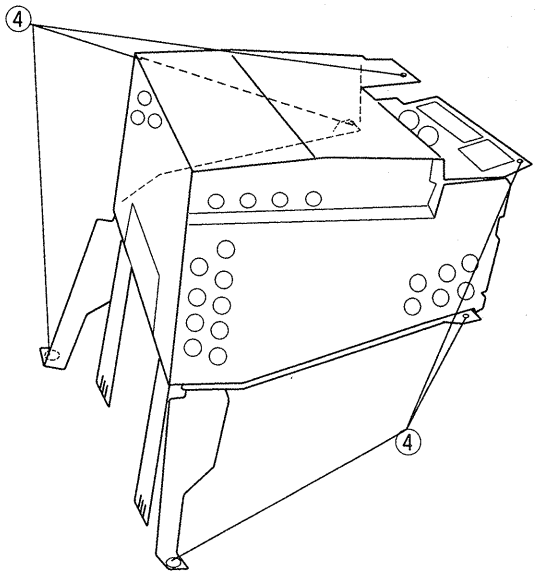

385
168
416
206
TILT
UP
13°
TILT
DOWN
4°
58.5
Ø255
134

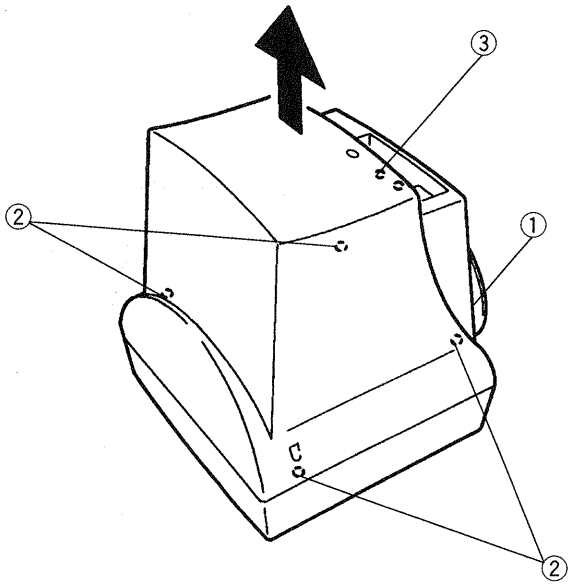
# DISASSEMBLY INSTRUCTIONS

## 1. Rear cover removal

*Note: Spread a mat underneath to avoid damaging the CRT surface.*

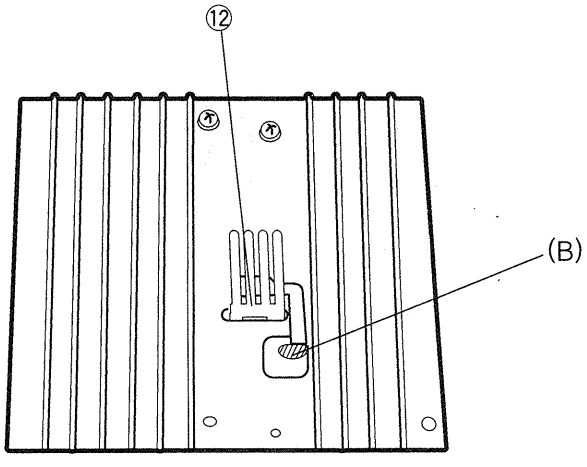
1) Remove USB base from cabinet ①.
2) Remove four large screws ② and one small screw ③ from the rear cover.
3) Remove the cover.
4) Remove six screws ④ from the shield case.
5) Remove the shield case.



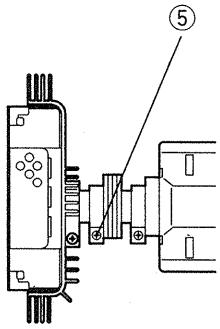



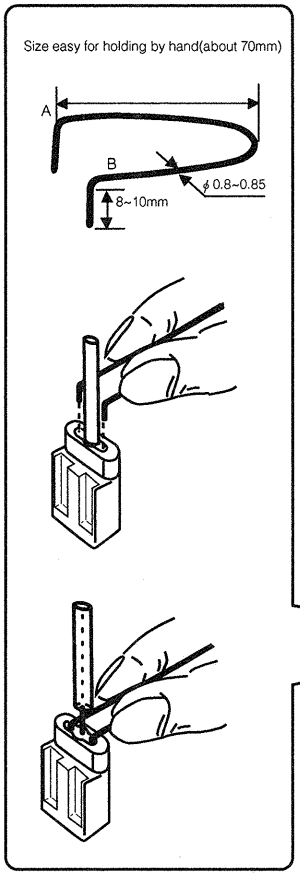

## 2. Video PCB removal

1) Desolder (B) and Remove the earth piece ⑫.

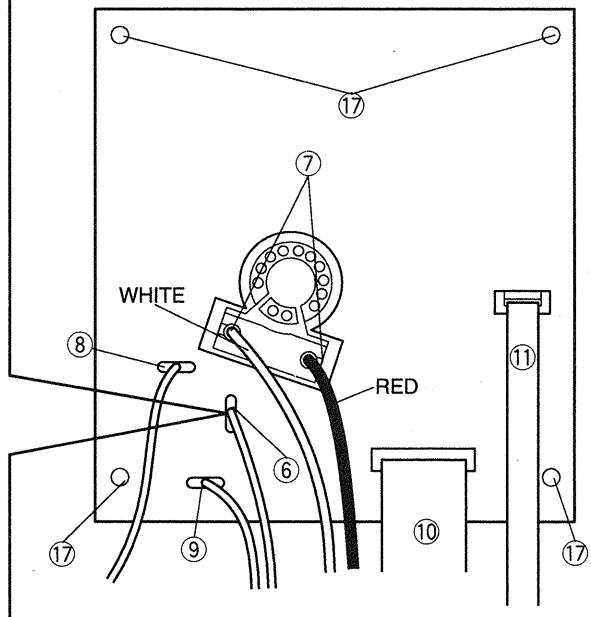


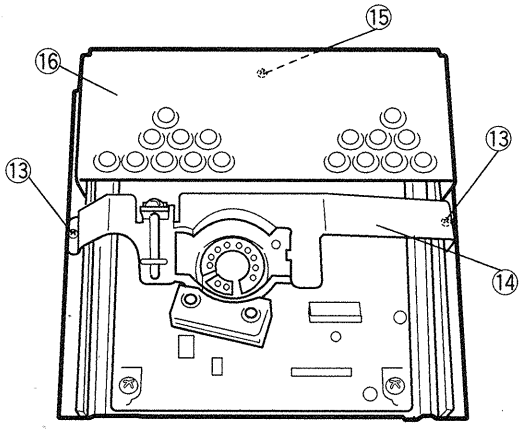
2) Loosen the screw ⑤ securing the CRT neck and the shield case.
3) Remove the PCB block from the CRT.
4) Remove the N1006 connector ⑥.
5) Remove two focus leads ⑦ after pulling up the focus lead securing lever.
6) Remove ground connector ⑧ (N1005) connected to the PCB.
7) Remove N1007 connector ⑨.
8) Remove N100B connector ⑩.
9) Remove N110B connector ⑪.
10) Remove two screws ⑬,and remove holding metal fitting ⑭.
11) Remove screw ⑮,remove shield case ⑯.
12) Remove four screws ⑰.




Pinch the parts A and B on the outside with your fingers,adjust the width,insert them at the same time into the release holes, and release the lead wires.
Material:Steel,for example,cold finished steel bar.
Soft iron, such as of wire,is unusable.

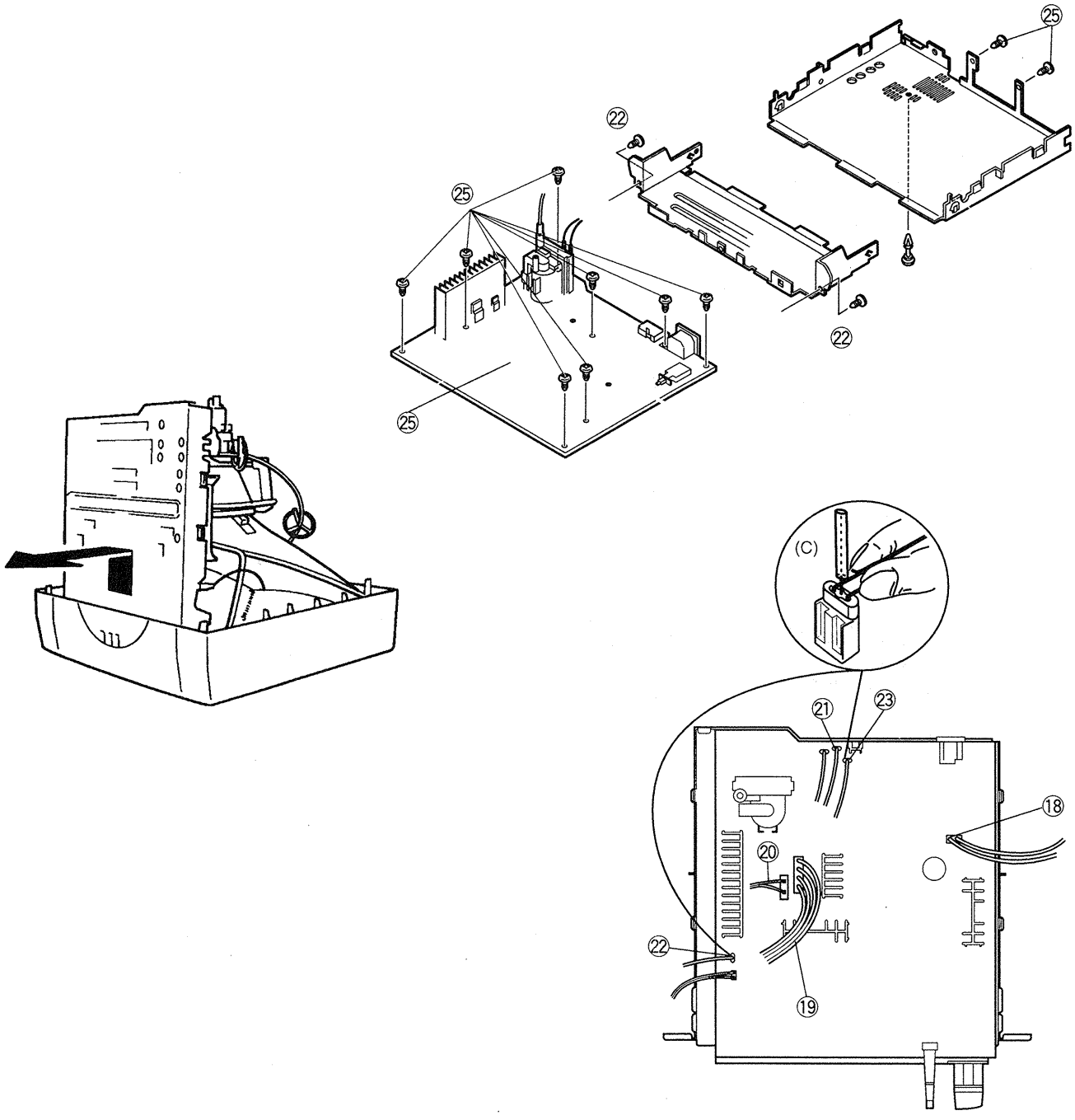



*Confidential - Do Not Copy*

### 3. Main PCB Removal

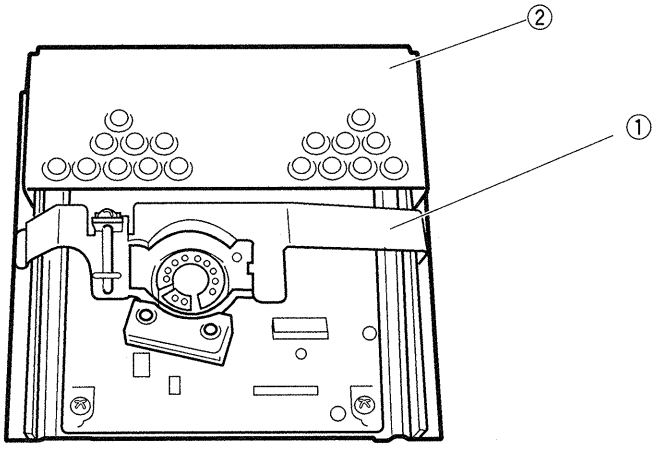
1) Remove the connector ⑱ (N901) of the degauss coil.
2) Remove the DY connecto ⑲ and ⑳
3) Remove the anode cap.
4) Remove ground connector ㉑.
5) Remove connector (N11) ㉒.(C)
6) Remove connector (N652) ㉓.(C)
7) Move the CRT face down and remove two screws ㉒ securing the bottom fitting metal.
8) Remove the fitting metal and the PCB from the cabinet.
9) Remove ten screws ㉔ securing the fitting metal and PCB.
10) Remove the PCB ㉕ with the figure referenced.

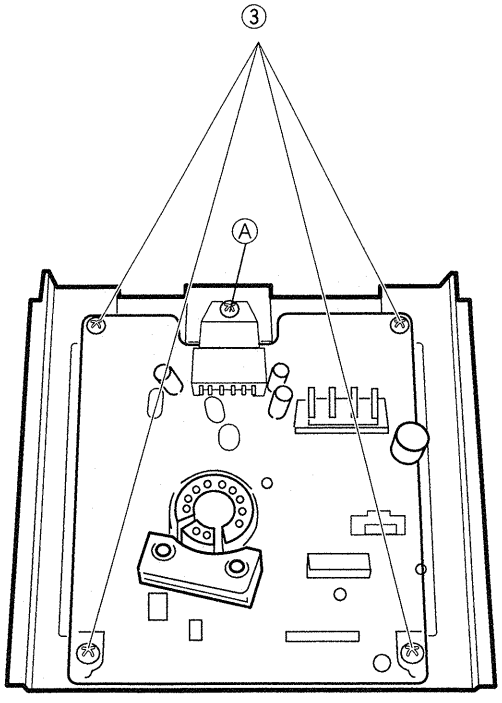


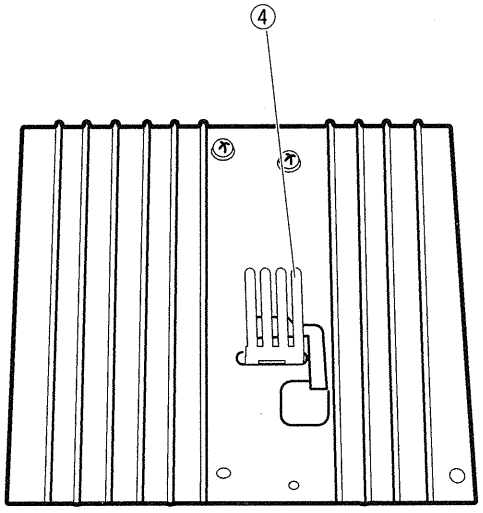
# NOTES FOR VIDEO PCB REPAIR SERVICING

The shield plate of the Video PCB used in this mode also functions as a radiation plate. To repair the model, this shield must be removed before servicing. However, if the model is fed power without this plate, IC1303 will be broken as a result of thermal destruction. To avoid such a difficulty, check the circuit in the powered state after difficulty, check the circuit in the powered state after following the steps described below to fix the shield plate:

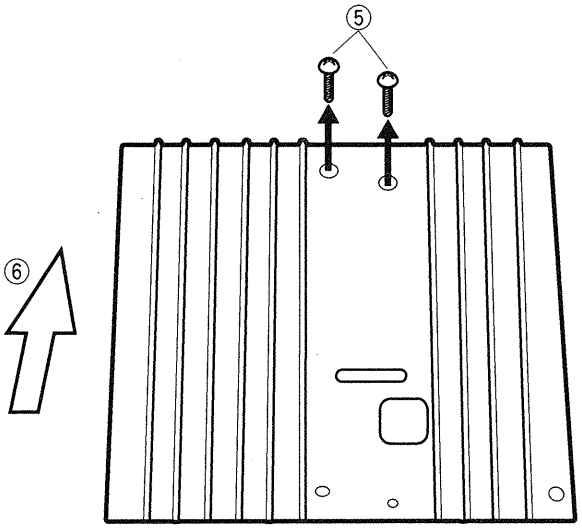
1. Remove the holding metal fitting ①.
2. Remove the shield case ②.
3. Remove the four screws ③ used to fix the PCB. (Do not remove the screws that fasten the IC.Ⓐ)
4. Remove the earth piece ④.

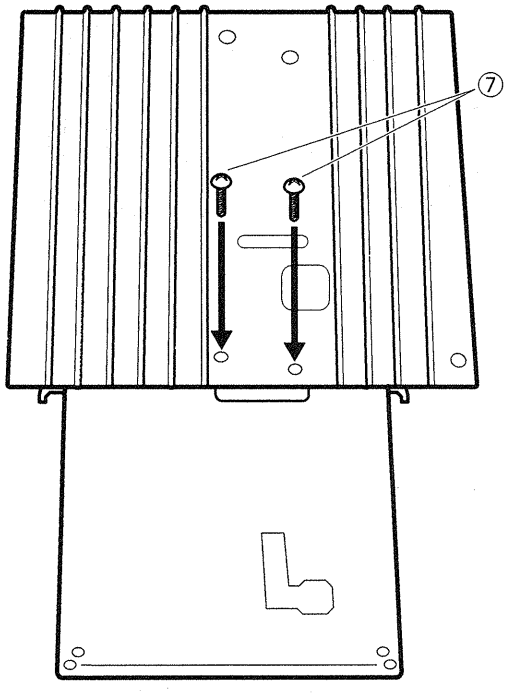


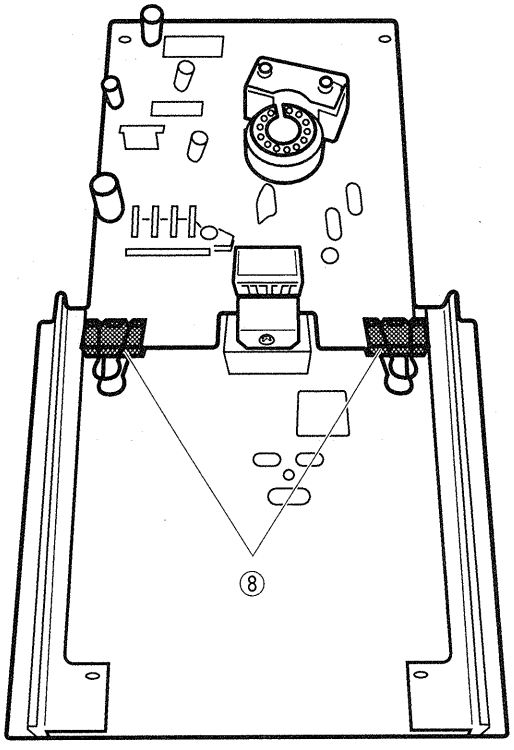



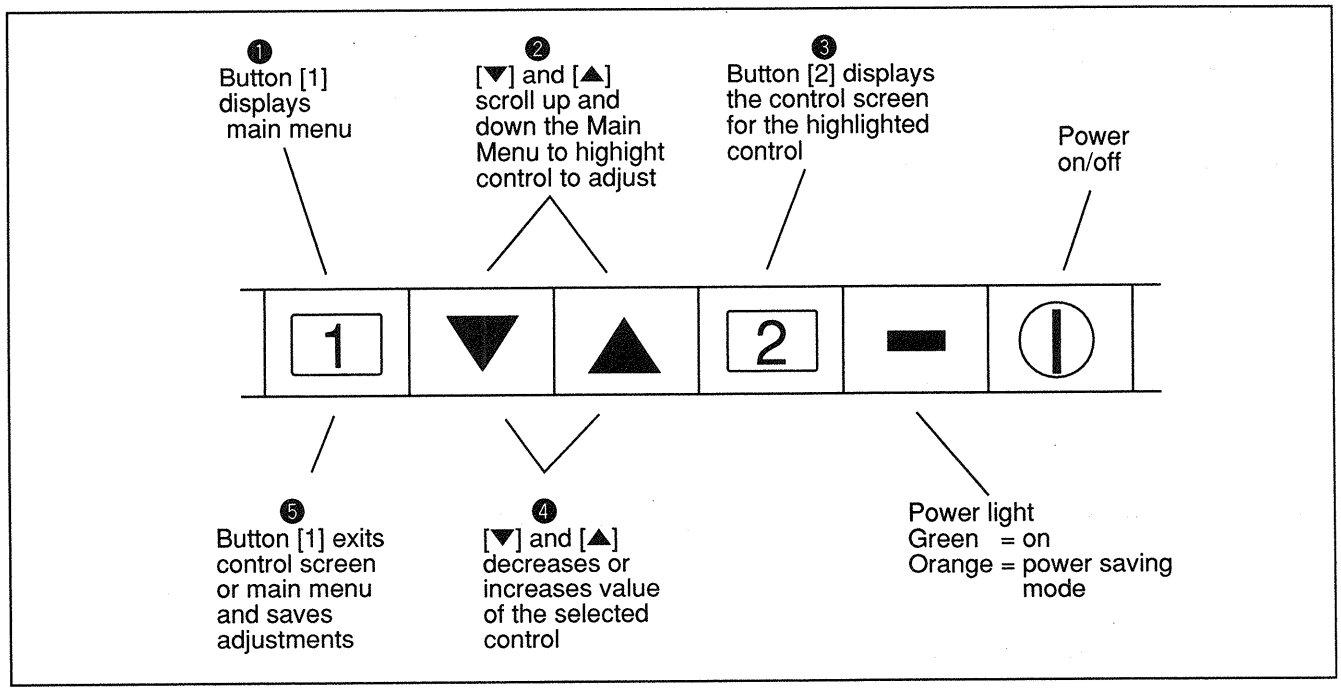
5. Remove the screw ⑤ and slide it in the direction of ⑥.
6. Use the screw ⑤ removed as per 5 .above, and set it in the hole of ⑦.
7. Use the binder clip ⑧ to fix the PCB.



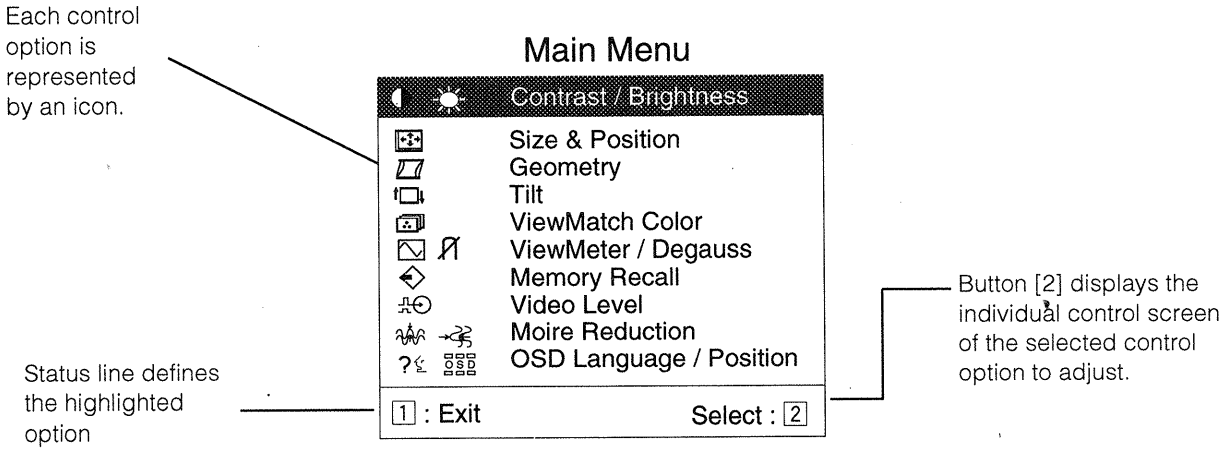



# Front Control Panel


❶ Button [1] displays main menu
❷ [▼] and [▲] scroll up and down the Main Menu to highight control to adjust
❸ Button [2] displays the control screen for the highlighted control
Power on/off
1
2
❺ Button [1] exits control screen or main menu and saves adjustments
❹ [▼] and [▲] decreases or increases value of the selected control
Power light
Green = on
Orange = power saving mode

## OnView® Main Menu

1 Press button [1] to display the Main Menu shown below.
2 Press the [▼] or [▲] buttons to select a control option to adjust.
3 Press button [2] for an individual control screen.
4 At each individual control screen,press the [▼] or [▲] to make adjustments.
5 Press button [1] to save changes and exit the screen.The Main Menu also clears automatically approximately 20 seconds after pressing button.



## CAUTION FOR ADJUSTMENT AND REPAIR

1. Degaussing is inevitably required at purity adjustment or convergence adjustment.
2. If you check or adjust electrical specification or function, more than 20 minutes burn-in is required.
3. Reforming of the lead wire is required after your repair work.
4. Prior to starting work, be sure to check that the input signal is at the specified timing and that the polarity is as specified in all modes.
5. Brightness control: After mounting the rear cover, brightness tends to decrease about 5 cd/m² on a flat white field and about 1 cm/m² on a white raster field. This should be taken into consideration.
6. Brightness stabilizing time: It takes about 20 to 50 seconds for the brightness to stabilize after turning the power off for 5 seconds (AC). Therefore, care should be taken to this.
7. Aging should be made in white raster of 30 ~ 50 cd/m² and raster size, 320 x 240 mm before adjusting the ITC.
8. Set the CONTRAST to MAX and BRIGHTNESS to CENTER using the O.S.D.

## CAUTION FOR SERVICING

When servicing or replacing the CRT, high voltage sometimes remains on the anode. So, completely discharge high voltage before servicing or replacing the CRT so as to prevent a shock to the service person.

**CRT Anode Discharge**

1. When you check the CRT anode or replace the CRT, discharge the CRT anode to the external conductive coating (aquadag) of CRT, especially when checked right after power turn-off.
2. Ground one end of a jumper wire which has a resistor (30 kV < resisting pressure 100 MΩ) and connect the other point to the CRT anode.

*Note: Grounding must be done first.*

This model has a section that does not share a common ground with the power supply section. The different sections are referred to as the HOT section and the COLD section in the precautions below.

1. Do not touch the HOT section and the COLD section at the same time. You may be hit by an electric shock.
2. Do not short the HOT section to the COLD section. This could blow the fuse or damage parts.
3. Never measure the HOT section and the COLD section at the same time when using tools such as oscilloscopes or multimeters.
4. Always unplug the unit before beginning any operation such as removing the chassis.

# ADJUSTMENT AND CHECK PROCEDURE

## INTRODUCTION

- This monitor is controlled by a microcomputer. With the exception of purity/convergence/focus all is digitally adjusted.
  Therefore a computer, the dedicated control software, the dedicated interface, a 9~12 V power supply, and a signal generator are required servicing.

## TOOLS REQUIRED

- **Computer**
  The control software is IBM PC compatible only. Therefore, it is not compatible with any other operating systems. For further information please contact **our sales office.**

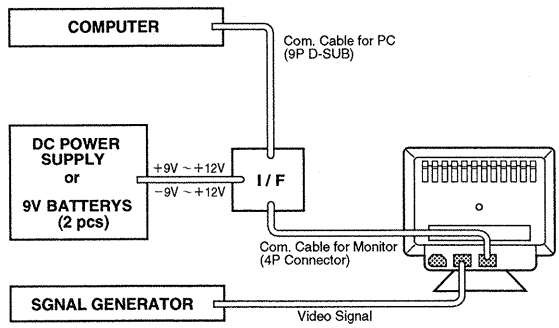
- **Control Software**
  The **PS775** can only use adjustment program disk" for this model. No other program can access the EEPROM on the monitor. For further information please contact **our sales office.**

- **Interface**
  The interface is dedicated to work only with the control software and the **PS775** . There are no substitutes for this interface. For further information please contact **our sales office.**

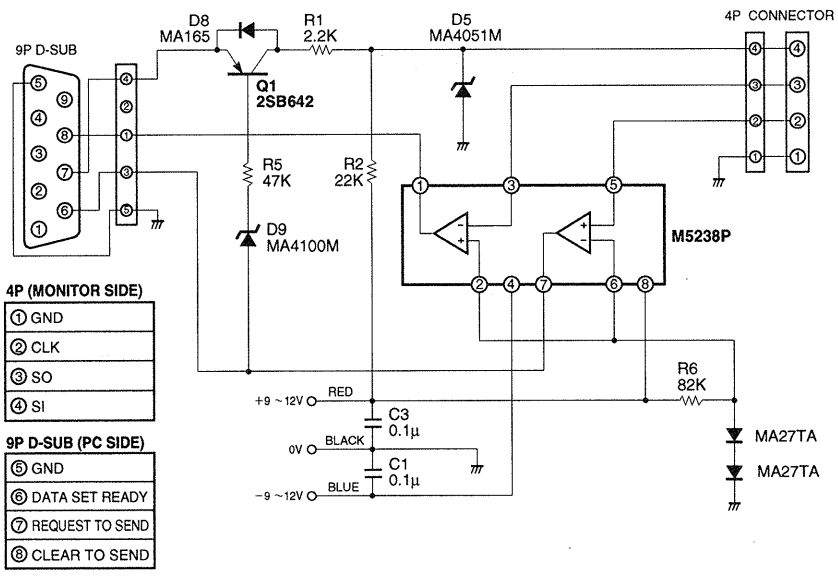
- **Power Supply**
  A DC 9~12 V (+9~12 V/–9~12 V) power supply is required for operating the interface.

- **Signal Generator**
  It is necessary for you to use a signal generator which operates on fH 70 kHz, fv 180 Hz, and fc 135 MHz bands.

## INTERFACE CONNECTION




## INTERFACE SCHEMATIC DIAGRAM

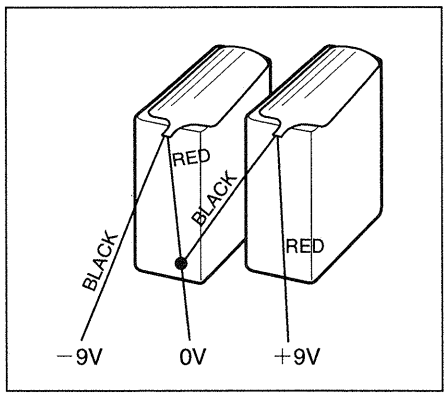



**4P (MONITOR SIDE)**

| |
|---|
| ① GND |
| ② CLK |
| ③ SO |
| ④ SI |

**9P D-SUB (PC SIDE)**

| |
|---|
| ⑤ GND |
| ⑥ DATA SET READY |
| ⑦ REQUEST TO SEND |
| ⑧ CLEAR TO SEND |




BATTERY CONNECTION

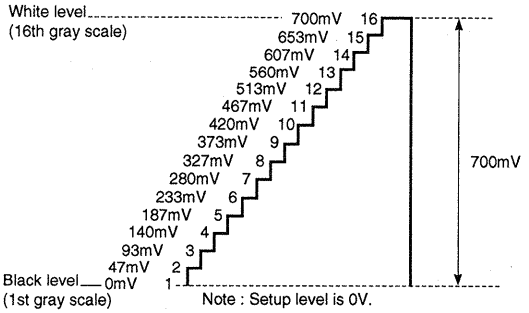
## OTHER TOOLS

- Oscilloscope (dual trace)
- Scope probe – Attenuation: 100:1
  Attenuation: 10:1
- Digital Voltmeter – Range: 0 to 1000 V DC
  Accuracy: 0.1 %
- TV color Analyzer II – that reads luminance and chromaticity X and Y coordinates.
- Digital High Voltmeter
- AC power supply – Output voltage : 0 to 300 V
- Degaussing coil
- Convergence meter
- Scale
- Double-faced scale
- Microscope – Scale factor: 50
- White racquer (Paint)

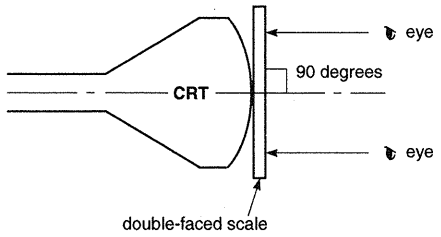
## STANDARD CONDITION OF ADJUSTMENT PROCEDURE

- Signal timing : Standard timing 1024 x 768 (See page 5)
- Display pattern : White, full "H" character
- Signal level : V/H: TTL level video: 700 mV
- Input source : AC 120 V, 60 Hz
- Ambient temperature : Room temperature
- Warm-up time : More than 30 minutes
- Brightness control : Center
- Contrast control : Max.
- Magnetic field : Vertical: 40 μT
  Horizontal: 0 μT
- Signal cable : Attached

Video input signal from PC.




- Use a Helmholtz device to adjust an unit with no horizontal magnetic field and a vertical field of 40 μT. Inspect the unit under the same conditions.
- The ambient illuminance must be 200 lux.
- Use an external degaussing coil any time the DEGAUSS switch does not remove color shading.
- To check the image width, height, linearity and distortion, proceed as below.




# ADJUSTMENT SOFTWARE

### 1. Software operating procedure

A) Power on the computer.

B) Connect the Communication cable for monitor adjustment.

C) Insert the adjustment disk into the drive.

D) At the A:> prompt type **"VSR"** , then press [ENTER].

> A function to identify the connected monitor is provided to prevent accidents due to erroneous use of the chassis program. If this program is used for any monitor other than the,the message reading "This monitor is not an **PS775** . All further activity has been prevented" is displayed and the operation is stopped.

E) Refer to the adjustment procedures.

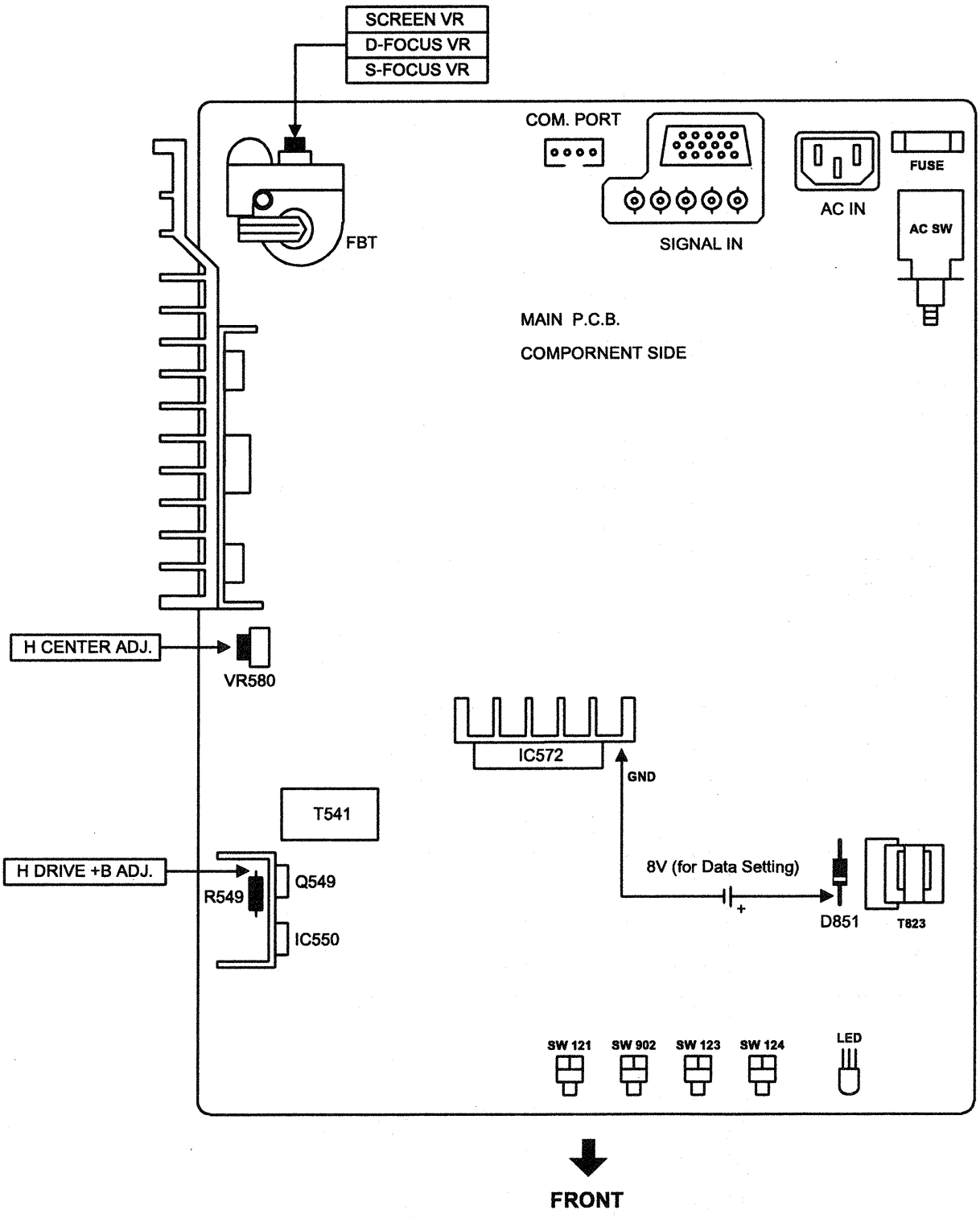
### 2. Adjustment Program

Main Menu of Adjustment Program

< **PS775** ADJUSTMENT PROGRAM MENU>>
(e: exit) <Ver0.53>

| | |
|---|---|
| 1) Load data from FILE | 5) Save data to FILE |
| 2) Adjust OTHER setting | 6) Special ADJUST |
| 3) Adjust Factory preset | 7) Information Service |
| 4) Clear User preset | 8) Show Version & Error |

# SERVICE ADJUSTMENT CONTROL LOCATION



## REQUIRED ADJUSTMENT PROCEDURE AFTER A PART IS REPLACED (✓ IS REQUIRED)

| | ADJUSTMENT ITEM | REPLACED PARTS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MAIN P.C.B. | VIDEO P.C.B. | CRT DY | FBT IC671 Q601 | IC1301 IC1302 IC1303 | IC1332 Q1051 Q1052 Q1151 Q1152 Q1251 Q1252 | IC490 | IC550 | Q550 IC850 Q881 | IC580 | IC102 | IC901 | | | | |
| A | DATA SETTING * | ✓ | | | | | | | | | | ✓ | | | | | |
| B | VCO ADJUST | ✓ | | | | | | | | | | ✓ | | | | | |
| C | H. CENTER | ✓ | | ✓ | ✓ | | | ✓ | | ✓ | ✓ | ✓ | | | | | |
| D | STANDARD SETTING | ✓ | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| E | PRESET ADJUST | ✓ | | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | | | | | |
| F | CUT-OFF, BRIGHTNESS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | | | | | |
| G | FOCUS ADJUST | ✓ | | ✓ | ✓ | | | | | | | ✓ | | | | | |
| H | DATA SAVING | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | | | |
| | | | | | | | | | | | | | | | | | |
| | PURITY & CONVERGENCE | | | ✓ | | | | | | | | | | | | | |
| | SCREEN CHECK | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| | | | | | | | | | | | | | | | | | |

*** DATA SETTING : Do not load standard data except when main PCB and IC102 are replaced.**

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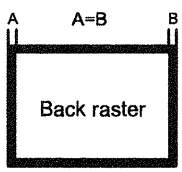
# ADJUSTMENT PROCEDURE

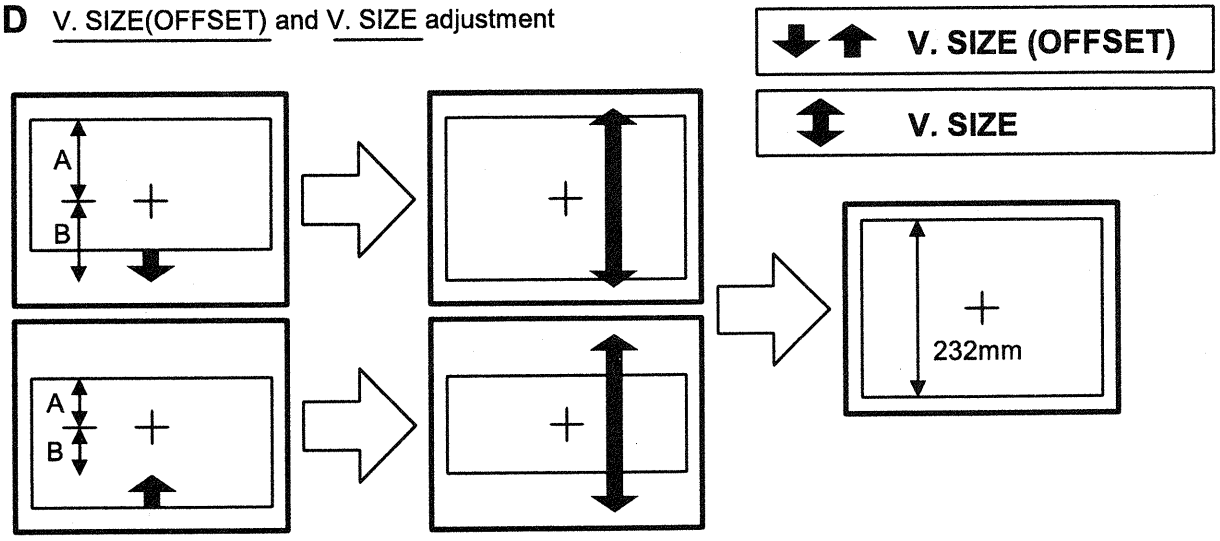
Note 1 : Check to be sure that the program disk name is **PS775** before making necessary adjustment.
Note 2 : Unless otherwise specified, the monitor state is as given at right.
Note 3 : The underlined places indicate the adjustment items on the screen of the PC.
Note 4 : When "E" is pressed in the main menu to complete the adjustment program "please turn off/on the monitor." message will be displayed, then turn off the monitor's power switch and turn on again, as required.

## 1. Description of Adjustment Method

| | ITEM<br>Program Menu | ❖ Test Meter<br>⊙ Test Point<br>☐ Pattern | JOB CODE | Input Signal | Operation | Adjusting Value |
|---|---|---|---|---|---|---|
| A | **STANDARD DATA SETTING** | | A1 | | Do not connect the power and signal cable to monitor. | |
| | | ⊙ D851 ~ GND | A2 | | Apply 8V to D851 CATHODE and GND.<br>( Do not apply 5V to IC101. Because IC851 supply 5V and RESET signal to IC101 ) | |
| | Refer to Service Adjustment Control Location for this connect point. | | | | | |
| | 1) Load data from FILE | | A3 | | Set the cell to 1) Load data from FILE , and press [↵]. | |
| | | | A4 | | A massage<br>**FILE -> EEPROM FILE NAME (q or Q escape) [ ] :** is displayed. So key in the DACDATA.DAT (when using the standard data) and press [↵]. | |
| | | | AE | | Disconnect 8V cable, then turn on the power switch of the monitor. | |
| | **Do not load standard data except when Main P.C.B. and IC102 (EEPROM) are replaced.** | | | | | |
| B | **VCO ADJUST**<br>6) Special ADJUST<br>1:VCO adjust | ☐ Crosshatch | B1 | Mode-7 | Check that the input signal to the monitor is [fH 68.7kHz] and [fV 85.0Hz], then press [↵]. | |
| | | | B2 | | Set the cell to the menu of 6) Special ADJUST on the main menu and press [↵]. | |
| | | | B3 | | Select the 1 : VCO adjust from the sub menu.<br>This messages will appear :<br>**Now adjusting VCO automatically !**<br>**Finished adjustment ? (Y/N) >** | |
| | | | BE | | Press [**Y**] [↵] to return to menu of **B2**, then press [**E**] [↵] to return to the main menu. | |
| C | **H. CENTER** | ☐ RGB off<br>(Sync only) | C1 | | Set the Brightness to MAX on the OSD. |  |
| | | | C2 | Mode-7 | Check that the input signal to the monitor is [fH 68.7kHz] and [fV 85.0Hz]. | |
| | | | C3 | | Make the adjustment as shown at right by turning the **VR580** on the main PCB. | |

| ITEM<br>Program Menu | ❖ Test Meter<br>⊙ Test Point<br>☐ Pattern | JOB CODE | Input Signal | Operation | Adjusting Value |
|---|---|---|---|---|---|
| **STANDARD SETTING** | | D1 | Mode-7 | Check that the input signal to the monitor is [fH 68.7kHz] and [fV 85.0Hz]. | |
| 2) Adjust OTHER setting | | D2 | | Set the cell to 2) Adjust OTHER setting , and press [↵]. | |
| Adjust STANDARD Setting | | D3 | | Set the cell to Adjust STANDARD Setting and press [↵]. | |
| | | D4 | | Following message will appear.<br>**Please turn off/on the monitor !!** | |
| | | D5 | | Make turn OFF the power SW on the monitor, and turn ON the monitor, then press [↵]. | |
| | ☐ Crosshatch | D6 | | Check that the input signal to the monitor is [fH 68.7kHz] and [fV 85.0Hz], then press [↵]. | |
| **H. DRIVE +B** | ❖ Digital Voltmeter<br>⊙ J121 ~ GND | D7<br>D8 | | Set the cell to H. DRIVE +B and press [↵].<br>Make the adjustment to the value shown at right by using [←] and [→]. | 23.1V ±0.5V |
| D Refer to Service Adjustment Control Location for this connect point. | | D9 | | To register by press [↵]. | |
| **EHT ADJUST** | ☐ RGB off (Sync only)<br>❖ Digital Voltmeter<br>❖ High Voltage Probe<br>⊙ Anode Cap ~ GND | D10<br>D11<br>D12<br>D13<br>D14<br>D15<br>D16 | | Change to the pattern at left.<br>Turn the power switch of the monitor OFF.<br>Connect high voltage probe to Anode Cap and GND.<br>Turn the power switch of the monitor ON.<br>Move the cell to EHT and press [↵].<br>Make adjustment to the value shown at right by using [←] and [→].<br>To register by pressing [↵]. | 24.5kV ±0.3kV |
| **VSR SETTING** | ☐ Crosshatch | D17<br>D18<br>D19 | | Change to the pattern at left.<br>Set the cell to V. POSITION and press [↵], then set the value to "**80**" by using [←] and [→].<br>Set the cell to following items, and make the adjustment to the value shown at right by using [←] and [→].<br>① H. SIZE ② H. POSITION<br>③ V. SIZE ④ V. SIZE (OFFSET)<br>⑤ V. PCC ⑥ TRAPEZOID<br>⑦ V. PCC CORNER<br>⑧PARALLELOGRAM<br>⑨ V. PCC BALANCE<br>Refer to **Fig. D** on next page for **V. SIZE** and **V. SIZE (OFFSET)** Adjustment. | ① : 310mm ±5<br>③ : 232mm ±5<br>② : Center<br>⑤⑥⑦⑧⑨ : Best point |
| | | | | **– To be continued –** | |

**Fig. D** V. SIZE(OFFSET) and V. SIZE adjustment




| ITEM<br>Program Menu | ❖ Test Meter<br>⊙ Test Point<br>☐ Pattern | JOB CODE | Input Signal | Operation | Adjusting Value |
|---|---|---|---|---|---|
| **STANDARD SETTING** | | | | | |
| **VSR SETTING**<br>2) Adjust OTHER setting<br>Adjust STANDARD Setting. | ☐ Crosshatch | D20<br><br><br>D21<br><br>D21<br><br><br>D22<br><br>D23 | Mode-7 | After adjusting the above, press [E].<br>This messages will appear :<br>**Store calculated VSR data. OK (y/n) ? ->**<br>Press [Y] and [↵].<br>**Store FACTORY PRESET data. OK (y/n) ? ->**<br>Press [Y] and [↵], then following message will appear.<br>**Please turn off/on the monitor !!**<br>Make turn OFF the power SW on the monitor, and turn ON the monitor, then press [↵].<br>Press [E] to return to the main menu. | |
| **EHT DATA SET**<br>6) Special ADJUST<br>4:Adjust X-RAY protection | ☐ RGB off<br>(Sync only) | D24<br>D25<br>D27<br><br><br><br><br>D28<br><br>DE | | Change to the pattern at left.<br>Set the cell to 6) Special ADJUST and press [↵].<br>Select the 4 : Adjust X-RAY protection, then following message will appear, and monitor will make to power save mode.<br>**Now adjusting X-RAY automatically !**<br>**Finished Hit any key >**<br>Press [↵], and make turn OFF the power SW on the monitor, and turn ON.<br>Press [E] [↵] to return to the main menu. | |

D

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| | ITEM<br>Program Menu | ❖ Test Meter<br>⊙ Test Point<br>☐ Pattern | JOB CODE | Input Signal | Operation | Adjusting Value |
|---|---|---|---|---|---|---|
| E | **PRESET ADJUST**<br>3) Adjust Factory preset | ☐ Crosshatch | E1 | | Set the cell to 3) Adjust Factory preset , and press [↵]. | |
| | | | E2 | Mode-1 | Check that the input signal to the monitor is [fH 60.0KHz] and [fV 75.0Hz] and press [↵]. | |
| | | | E3 | | Set the cell to following items, press [↵] and make the adjustment to the value shown at right by using [←] and [→].<br>① H. SIZE ② H. POSI<br>③ V SIZE ④ V. POSI<br>⑤ V. PCC ⑥ V. PCC BALANCE<br>⑦ V. PCC CORNER<br>⑧ TRAPEZOID<br>⑨ PARALLEL | ① : 310mm ±5<br>③ : 232mm ±5<br>②④ : Center<br>⑤⑥⑦⑧⑨ :<br>Best point |
| | | | E4 | | After adjustment, return to menu of **E2** by pressing [ **E** ].<br>This messages will appear :<br>**Another timing adjust ? (y/n)** | |
| | | | E5 | | Press [**Y**] and [↵], go to **E7**. | |
| | | | E6 | Mode-2 | Check that the input signal to the monitor is [fH 31.5KHz] and [fV 60.0Hz] and press [↵]. | ① : 310mm ±7<br>③ : 232mm ±7 |
| | | | E7 | | Make adjustment value shown at right by using [←] and [→] for ①~⑨ of **E3**. | ②④ : Center<br>⑤⑥⑦⑧⑨ : |
| | | | E8 | | Press [**E**] and [**Y**] [↵], go to next adjust. | Best point |
| | | | E9 | Mode-3 | Check that the input signal to the monitor is [fH 37.5KHz] and [fV 75.0Hz] and press [↵]. | ① : 310mm ±7<br>③ : 232mm ±7 |
| | | | E10 | | Make adjustment value shown at right by using [←] and [→] for ①~⑨ of **E3**. | ②④ : Center<br>⑤⑥⑦⑧⑨ : |
| | | | E11 | | Press [**E**] and [**Y**] [↵], go to next adjust. | Best point |
| | | | E12 | Mode-4 | Check that the input signal to the monitor is [fH 46.9KHz] and [fV 75.0Hz] and press [↵]. | ① : 310mm ±7<br>③ : 232mm ±7 |
| | | | E13 | | Make adjustment value shown at right by using [←] and [→] for ①~⑨ of **E3**. | ②④ : Center<br>⑤⑥⑦⑧⑨ : |
| | | | E14 | | Press [**E**] and [**Y**] [↵], go to next adjust. | Best point |
| | | | | | **– To be continued –** | |

| | ITEM<br>Program Menu | ❖ Test Meter<br>⊙ Test Point<br>☐ Pattern | JOB CODE | Input Signal | Operation | Adjusting Value |
|---|---|---|---|---|---|---|
| E | **PRESET ADJUST**<br>3) Adjust Factory preset | ☐ Crosshatch | E15<br><br>E16<br><br>E17<br><br>E18<br><br>E19<br><br>E20<br><br>E21<br><br>E22<br><br>E23<br><br>E24<br><br>E25<br><br>EE | Mode-5<br><br><br><br>Mode-6<br><br><br><br>Mode-7<br><br><br><br>Mode-8<br><br><br><br> | Check that the input signal to the monitor is [fH 53.7KHz] and [fV 85.0Hz] and press [↵].<br>Make adjustment value shown at right by using [←] and [→] for ①~⑨ of **E3**.<br>Press [**E**] and [**Y**] [↵], go to next adjust.<br>Check that the input signal to the monitor is [fH 49.7KHz] and [fV 74.5Hz] and press [↵].<br>Make adjustment value shown at right by using [←] and [→] for ①~⑨ of **E3**.<br>Press [**E**] and [**Y**] [↵], go to next adjust.<br>Check that the input signal to the monitor is [fH 68.7KHz] and [fV 85.0Hz] and press [↵].<br>Make adjustment value shown at right by using [←] and [→] for ①~⑨ of **E3**.<br>Press [**E**] and [**Y**] [↵], go to next adjust.<br>Check that the input signal to the monitor is [fH 80.0KHz] and [fV 75.0Hz] and press [↵].<br>Make adjustment value shown at right by using [←] and [→] for ①~⑨ of **E3**.<br>Press [**E**] and [**N**] [↵], to return to the main menu. | ① : 310mm ±7<br>③ : 232mm ±7<br>②④ : Center<br>⑤⑥⑦⑧⑨ :<br>Best point<br><br>① : 310mm ±7<br>③ : 232mm ±7<br>②④ : Center<br>⑤⑥⑦⑧⑨ :<br>Best point<br><br>① : 310mm ±7<br>③ : 232mm ±7<br>②④ : Center<br>⑤⑥⑦⑧⑨ :<br>Best point<br><br>① : 290mm ±7<br>③ : 232mm ±7<br>②④ : Center<br>⑤⑥⑦⑧⑨ :<br>Best point |

| | ITEM<br>Program Menu | ❖ Test Meter<br>⊙ Test Point<br>☐ Pattern | JOB CODE | Input Signal | Operation | Adjusting Value |
|---|---|---|---|---|---|---|
| F | **CRT CUT-OFF ADJUST** | ❖ TV Color Analyzer II | F1 | Mode-1 | Set the Contrast to MAX, Brightness to Center and Color is 9300k using the OSD. | |
| | | ☐ RGB Off (Sync only) | F2 | | Check that the input signal to the monitor is [fH 68.7KHz] and [fV 85.0Hz] and turn off the RGB signal. | |
| | 2) Adjust OTHER setting | | F3 | | Set the cell to 2) Adjust OTHER setting , and press [↵] . | |
| | Adjust VIDEO Setting | | F4 | | Set the cell to Adjust VIDEO Setting at the sub menu and press [↵]. | |
| | | | F5 | | Make the adjustment R,G and B Low Light by using [←] [→] and Screen VR to CRT cut-off. **Please refer to flow chart for this adjustment on page 37.** | |
| | **BRIGHTNESS / COLOR ADJUST** | ☐ White window (5cm×5cm at center) | F6 | | Change to the pattern at left. | |
| | | | F7 | | Move the cell to the following items and make the adjustment to the value shown at right by using [←] and [→].<br>R. SUB CONT (COLOR0)<br>G. SUB CONT (COLOR0)<br>B. SUB CONT (COLOR0) | Y=145 cd/m$^2$<br>x=0.283 ±0.20<br>y=0.298 ±0.20 |
| | | | F8 | | Set Contrast to MIN using the OSD. | |
| | | | F9 | | Move the cell to the following items and make the adjustment to the value shown at right by using [←] and [→].<br>R. LOW LIGHT G. LOW LIGHT B. LOW LIGHT<br>**Adjust two colors only out of above three as shown in F13 on page 37.** | x=0.283 ±0.20<br>y=0.298 ±0.20 |
| | **ABL** | ☐ White flat field (full window) | F10 | | Change to the pattern at left. | |
| | | | F11 | | Move the cell to ABL (COLOR0) and make the adjustment to the value shown at right by using [←] and [→]. | Y=113 cd/m$^2$ |
| | | | F12 | | Press [**E**], then following message will appear :<br>**Start automatic calculation. OK (y/n) ? ->** | |
| | | | F13 | | Press [**Y**] and [↵].<br>**Refresh LOW-LIGHT2 data (y/n) ? ->** | |
| | | | FE | | Press [**Y**] and [↵] to return to menu of **F4**, then return to the main menu by pressing [**E**]. | |

| | ITEM<br>Program Menu | ❖ Test Meter<br>⊙ Test Point<br>☐ Pattern | JOB CODE | Input Signal | Operation | Adjusting Value |
|---|---|---|---|---|---|---|
| G | **FOCUS** | ☐ Character | G1<br><br>G2<br><br>G3<br><br>G4 | MODE-1 | Check that the input signal to the monitor is [fH 60.0KHz] and [fV 75.0Hz].<br>Make the corner sections of the screen optimum by turning D-FOCUS VR on the FBT.<br>Make the center section optimum by turning S-FOCUS VR on the FBT.<br>Repeat **G2** and **G3** to make it optimum. | |
| H | **DATA SAVING**<br>5) Save data to file | | H1<br>H2 | | Set the cell to 5) Save data to file , and press [↵].<br>Key in the file name.<br><br>Use serial number as a file name<br>( EXAMPLE : DD8310001 = "DD8310.001" ) | |

To read / write data for DDC, a special jig is required, but this jig is not available yet.
When this jig can be supplied, we will inform in the technical information.

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# CRT CUT- OFF ADJUSTMENT

**WARNING**

**Do not turn the screen VR after this adjustment.**

Conditions :

Signal : Turn off the R,G,B (sync signal only)

Adjust Menu : 2) Adjust OTHER setting at main menu

Adjust VIDEO setting at sub manu

**F5** Set screen VR fully counterclockwise (Min).

**F6** Set BRIGHTNESS to center point by using the OSD

**F7** Set data value to " C9 " for R, G, B LOW LIGHT

**F8** Turn screen VR until the raster appears with any one of three (R,G,B) colors

## If Red appears in F8

**F9** Set Value to " 00 " for < R. LOW LIGHT >

**F10** Turn screen VR until the raster appears with any one of two (G or B) colors.

### If Green appears in F10

**F11** Set Value to " 00 " for < G. LOW LIGHT >

**F12** Adjust Screen VR to " 0.55 " cd/m² for Blue raster

**F13** Adjust < R. LOW LIGHT > < G. LOW LIGHT > to [ x=0.283 y=0.298 ]

### If Blue appears in F10

**F11** Set Value to " 00 " for < B. LOW LIGHT >

**F12** Adjust Screen VR to " 3.46 " cd/m² for Green raster

**F13** Adjust < R. LOW LIGHT > < B. LOW LIGHT > to [ x=0.283 y=0.298 ]

## If Green appears in F8

**F9** Set Value to " 00 " for < G. LOW LIGHT >

**F10** Turn screen VR until the raster appears with any one of two (R or B) colors.

### If Red appears in F10

**F11** Set Value to " 00 " for < R. LOW LIGHT >

**F12** Adjust Screen VR to " 0.55 " cd/m² for Blue raster

**F13** Adjust < R. LOW LIGHT > < G. LOW LIGHT > to [ x=0.283 y=0.298 ]

### If Blue appears in F10

**F11** Set Value to " 00 " for < B. LOW LIGHT >

**F12** Adjust Screen VR to " 0.99 " cd/m² for Red raster

**F13** Adjust < G. LOW LIGHT > < B. LOW LIGHT > to [ x=0.283 y=0.298 ]

## If Blue appears in F8

**F9** Set Value to " 00 " for < B. LOW LIGHT >

**F10** Turn screen VR until the raster appears with any one of two (R or G) colors.

### If Red appears in F10

**F11** Set Value to " 00 " for < R. LOW LIGHT >

**F12** Adjust Screen VR to " 3.46 " cd/m² for Green raster

**F13** Adjust < R. LOW LIGHT > < B. LOW LIGHT > to [ x=0.283 y=0.298 ]

### If Green appears in F10

**F11** Set Value to " 00 " for < G. LOW LIGHT >

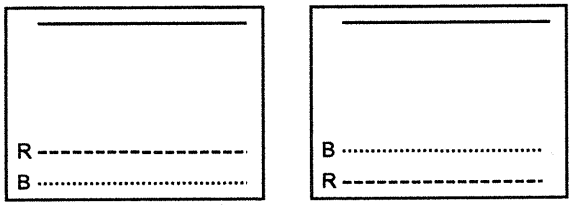
**F12** Adjust Screen VR to " 0.99 " cd/m² for Red raster

**F13** Adjust < G. LOW LIGHT > < B. LOW LIGHT > to [ x=0.283 y=0.298 ]

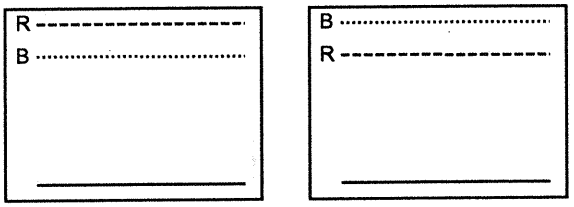
**F14** Test Pattern : 16 gradation grayscale. Adjust screen VR so the 3nd level of gray appears slightly.

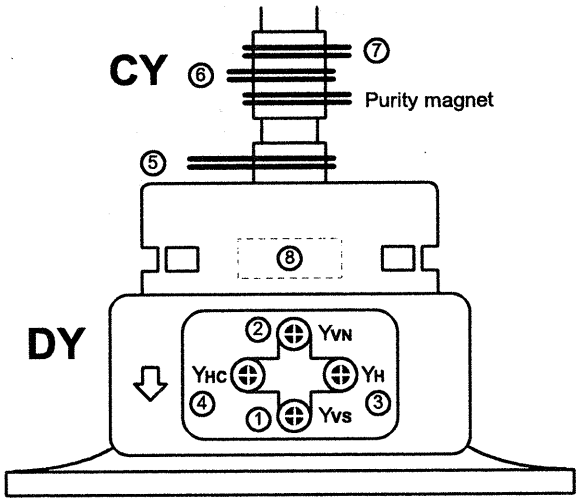
## 2. Adjustment Location for Purity and Convergence

① Differential VR YV-S

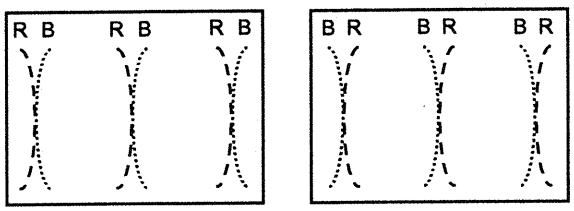



② Differential VR YV-N

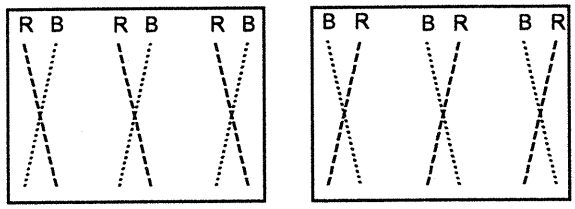


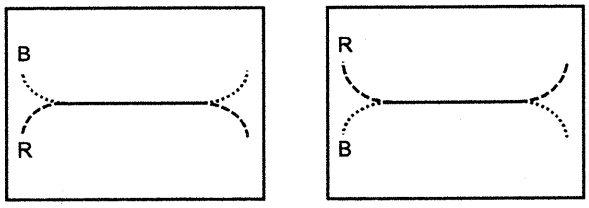

③ Differential VR YH




④ Differential VR YH-C



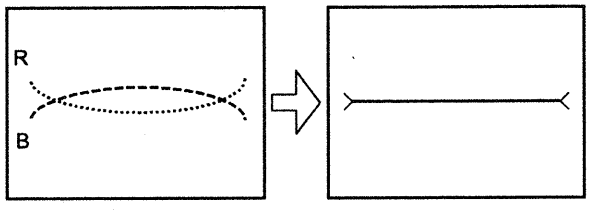

⑤ Four-pole magnet B




Beams are twisted lefthand

Beams are twisted righthand

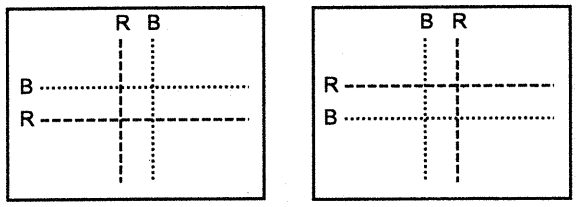
For example lefthand



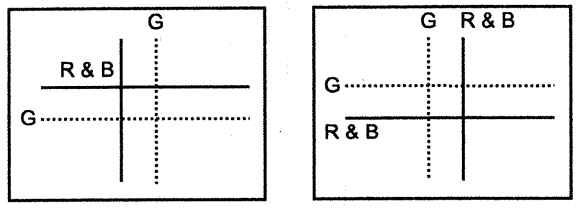

With four-pole magnet B ⑤

With four-pole magnet A⑥

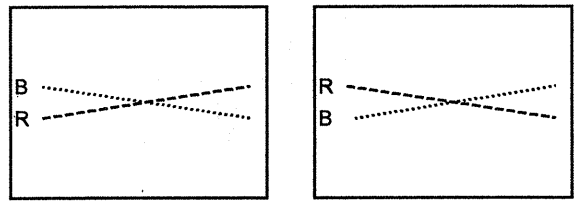
⑥ Four-pole magnet A




⑦ Six-pole magnet

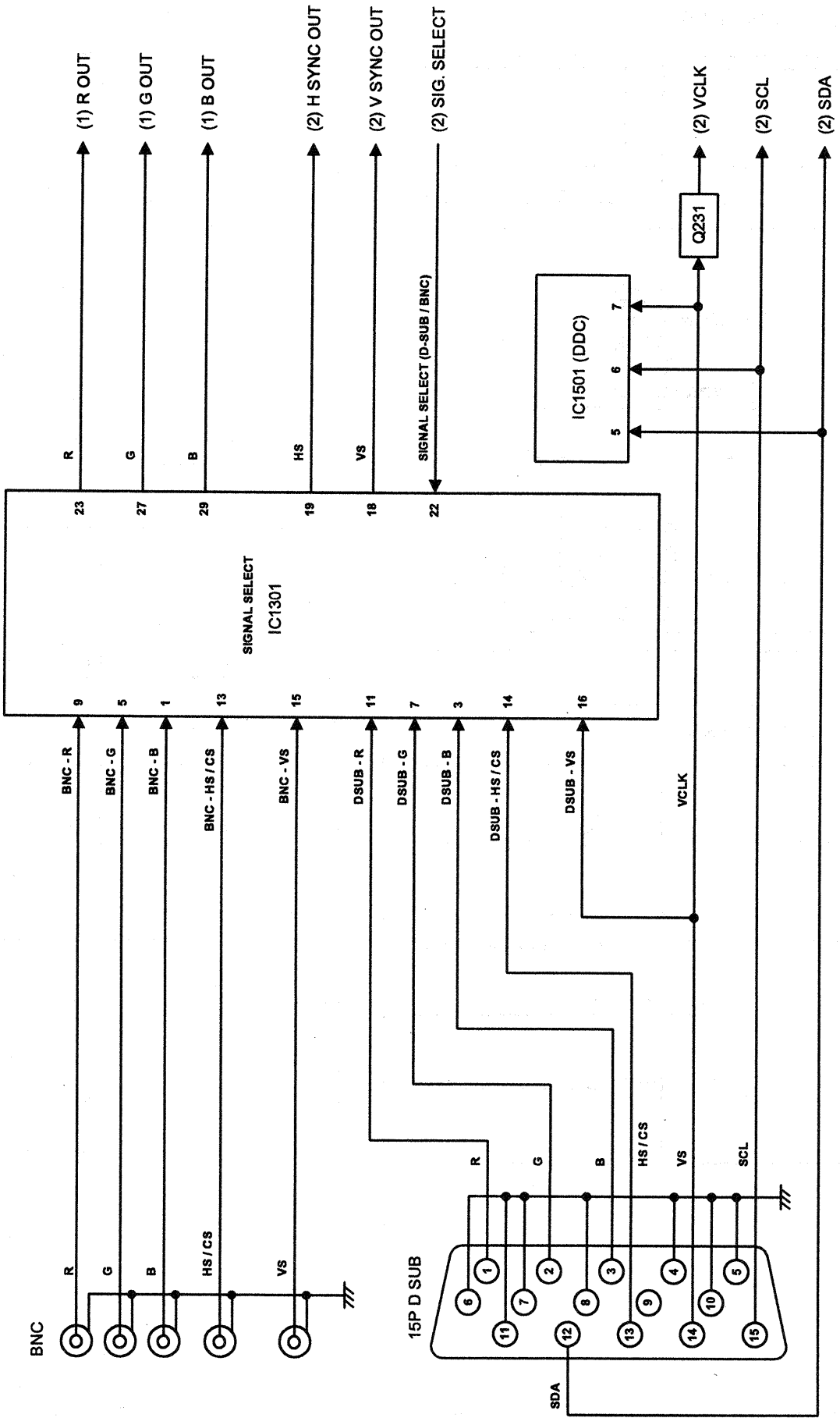



⑧ Differential Coil

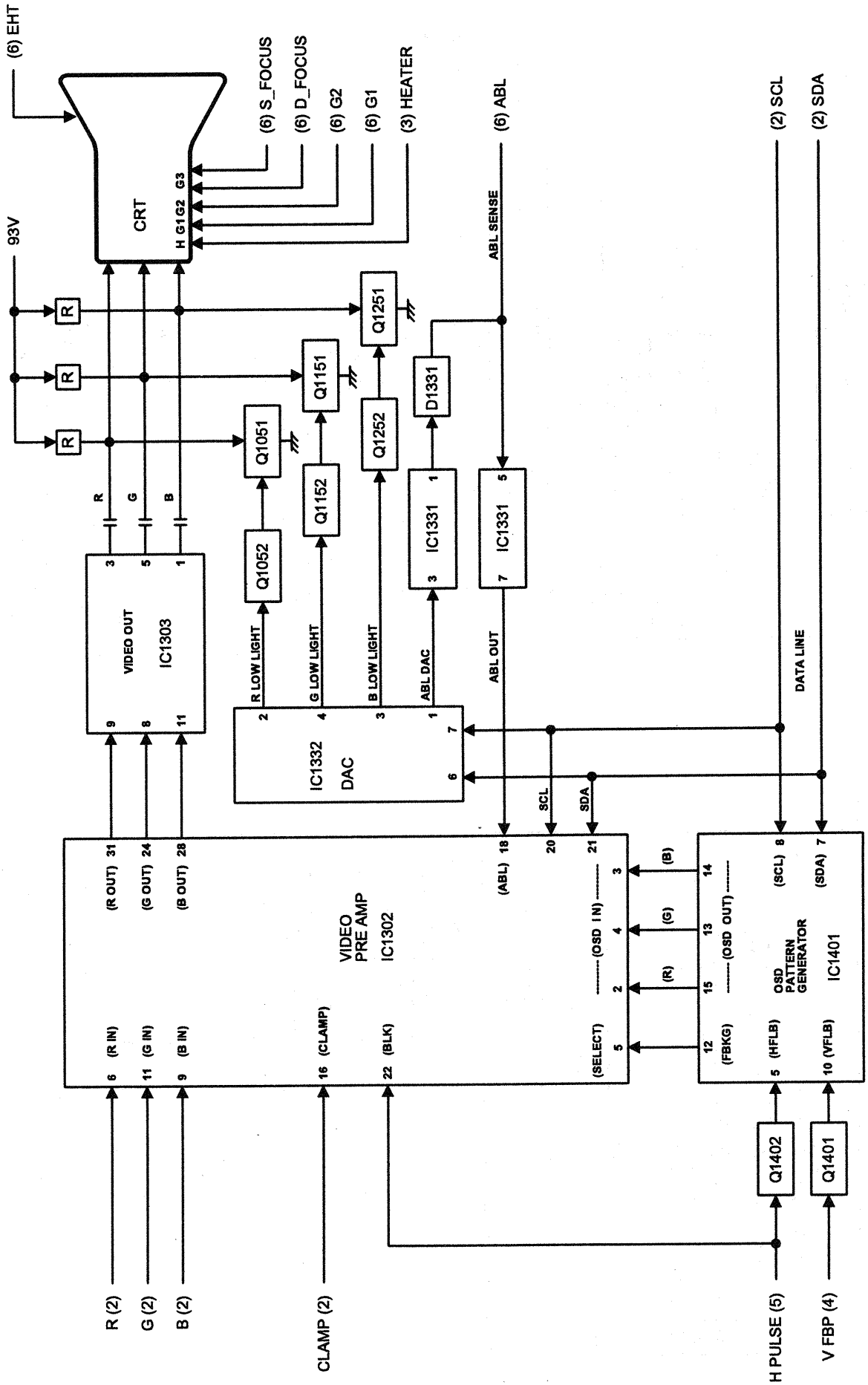


# BLOCK DIAGRAM

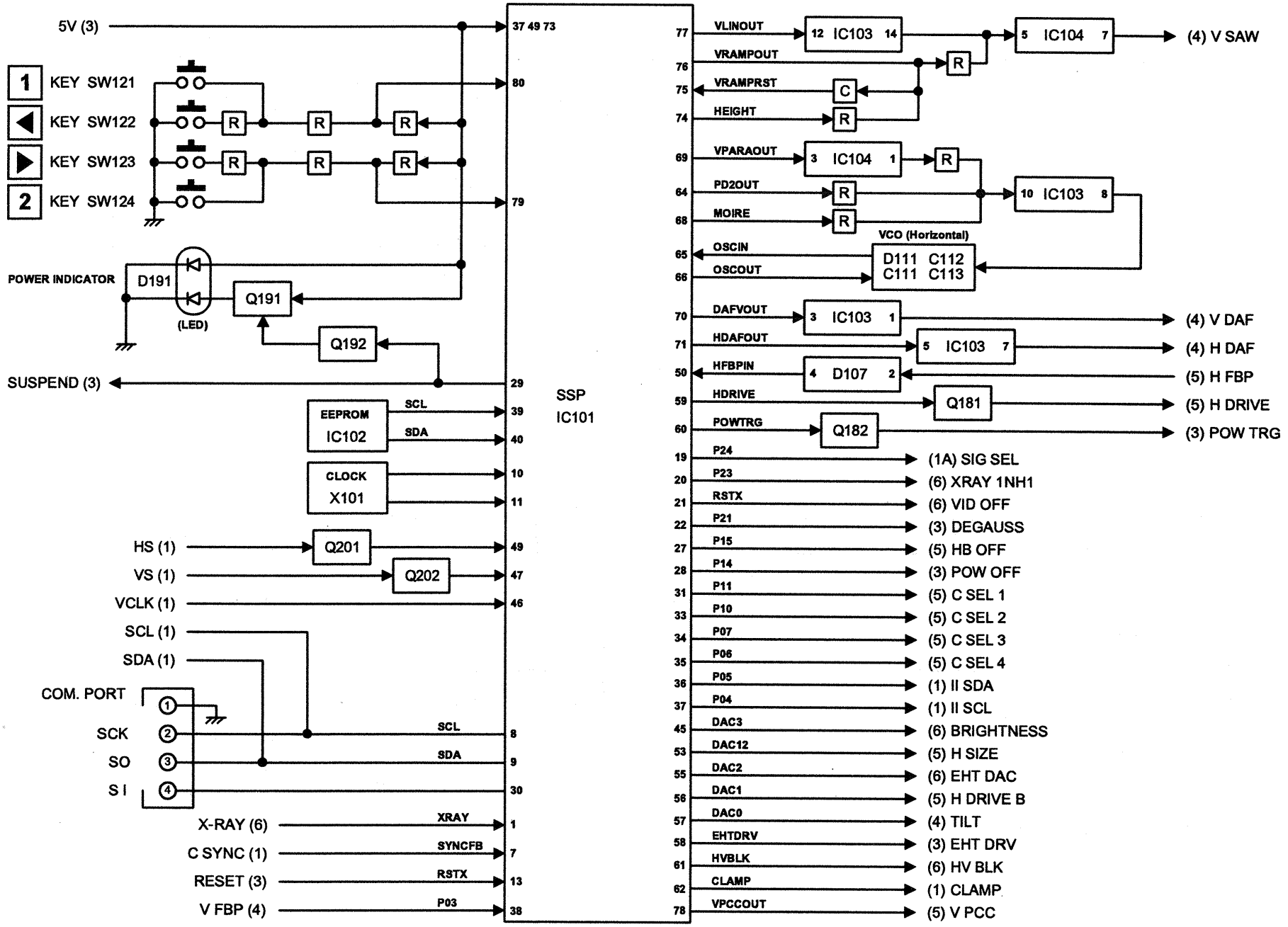
## SHEET (1A) HV12Z - SIGNAL INPUT



## SHEET (1) HV12Z - VIDEO AMP



# SHEET (2) HV12Z - MAIN CONTROL BLOCK



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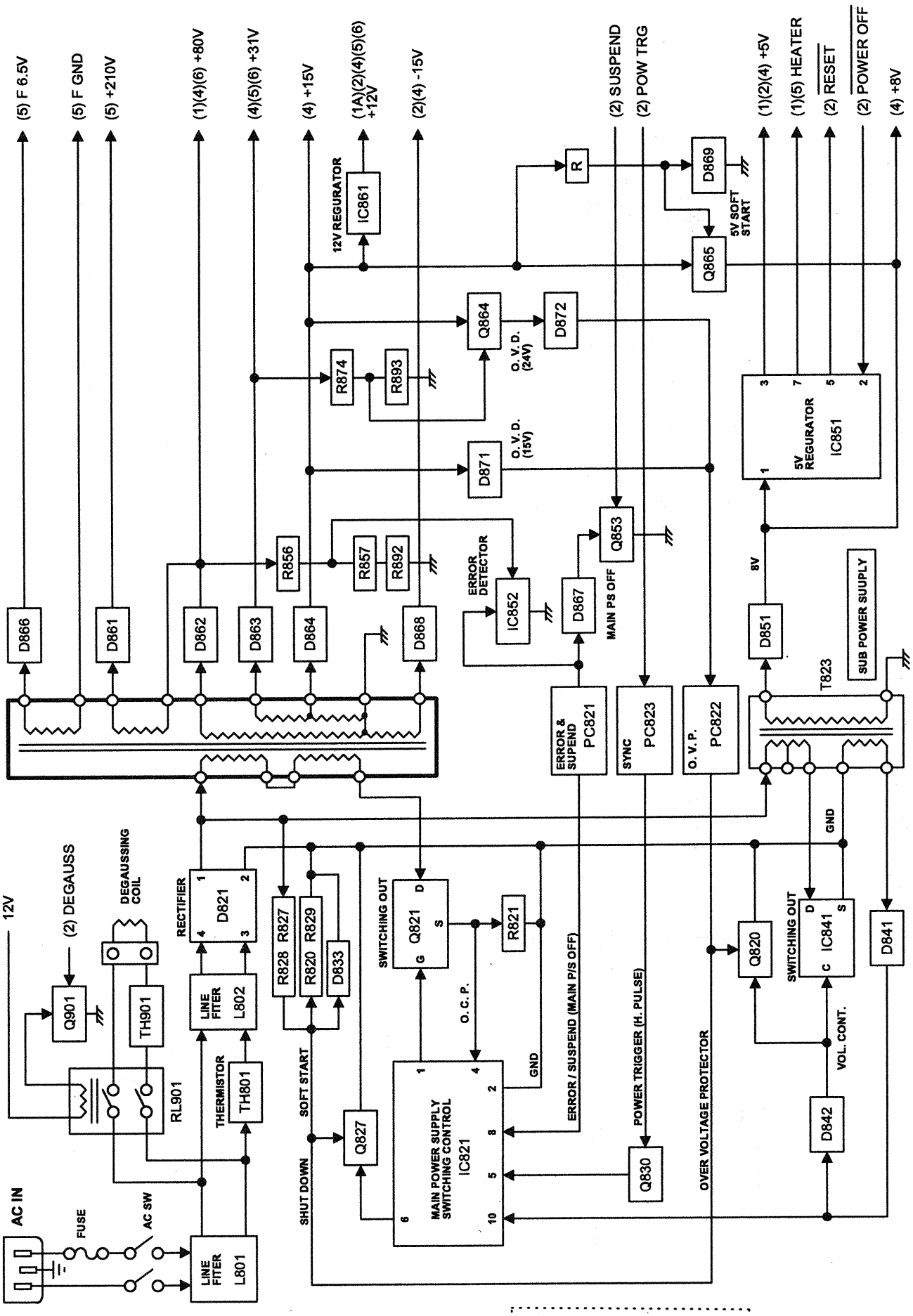
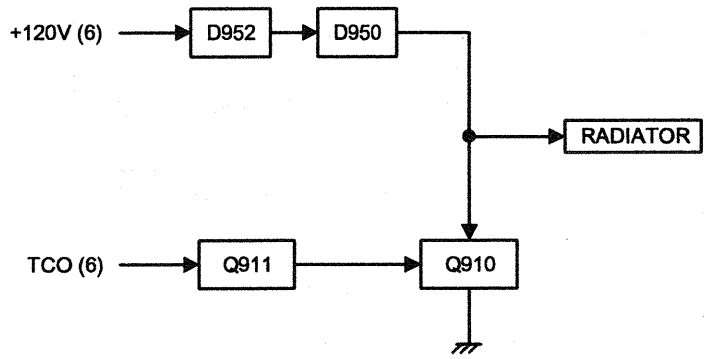
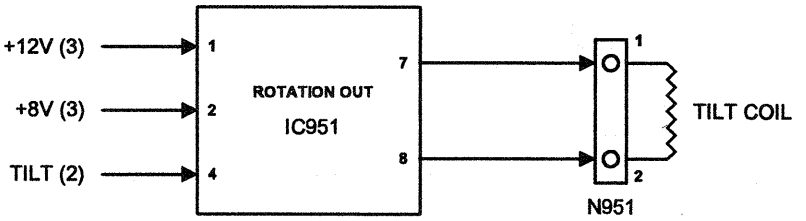
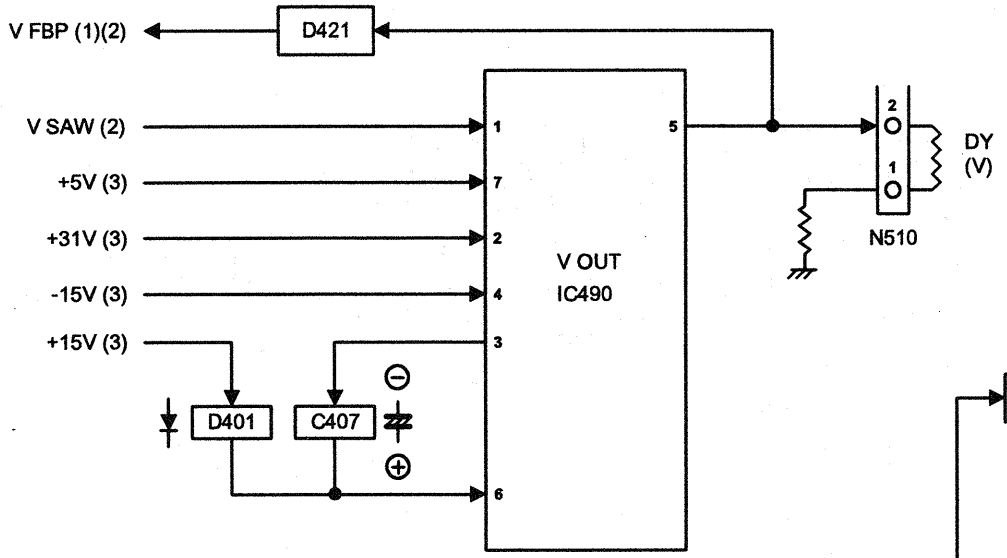
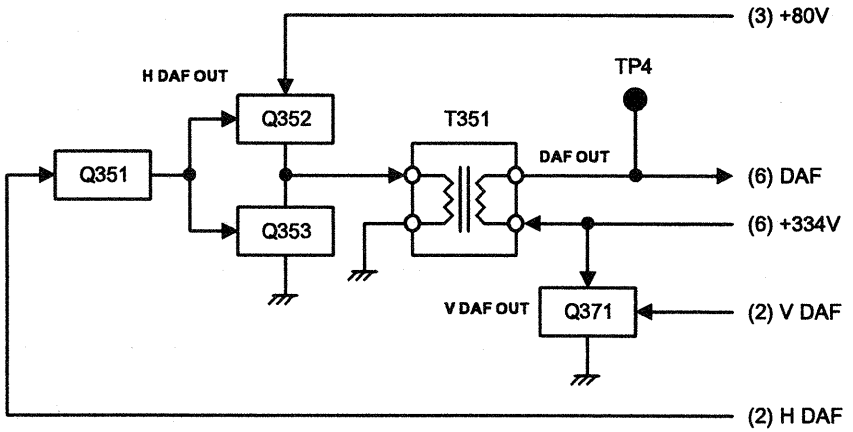

SHEET (3) HV12Z - POWER SUPPLY
(5) F 6.5V
(5) F GND
(5) +210V
(1)(4)(6) +80V
(4)(5)(6) +31V
(4) +15V
(1A)(2)(4)(5)(6) +12V
(2)(4) -15V
(2) SUSPEND
(2) POW TRG
(1)(2)(4) +5V
(1)(5) HEATER
(2) RESET
(2) POWER OFF
(4) +8V
12V REGURATOR
IC861
5V SOFT START
5V REGURATOR
IC851
O. V. D. (24V)
O. V. D. (15V)
ERROR DETECTOR
IC852
MAIN P/S OFF
ERROR & SUSPEND
PC821
SYNC
PC823
O. V. P.
PC822
8V
SUB POWER SUUPLY
T823
SWITCHING OUT
Q821
O. C. P.
ERROR / SUSPEND (MAIN P/S OFF)
POWER TRIGGER (H. PULSE)
OVER VOLTAGE PROTECTOR
MAIN POWER SUPPLY SWITCHING CONTROL
IC821
SHUT DOWN
SOFT START
GND
VOL. CONT.
SWITCHING OUT
IC841
RECTIFIER
D821
DEGAUSSING COIL
(2) DEGAUSS
12V
THERMISTOR
TH801
TH901
RL901
Q901
Q827
Q830
Q820
LINE FITER
L802
L801
AC IN
FUSE
AC SW
R828
R827
R820
R829
D833
R821
R874
R893
R856
R857
R892
R
D866
D861
D862
D863
D864
D868
D867
D871
D872
D869
D851
D841
D842
Q853
Q864
Q865

# SHEET (4) HV12Z - V OUT / DAF OUT / TILT CONTROL / TCO



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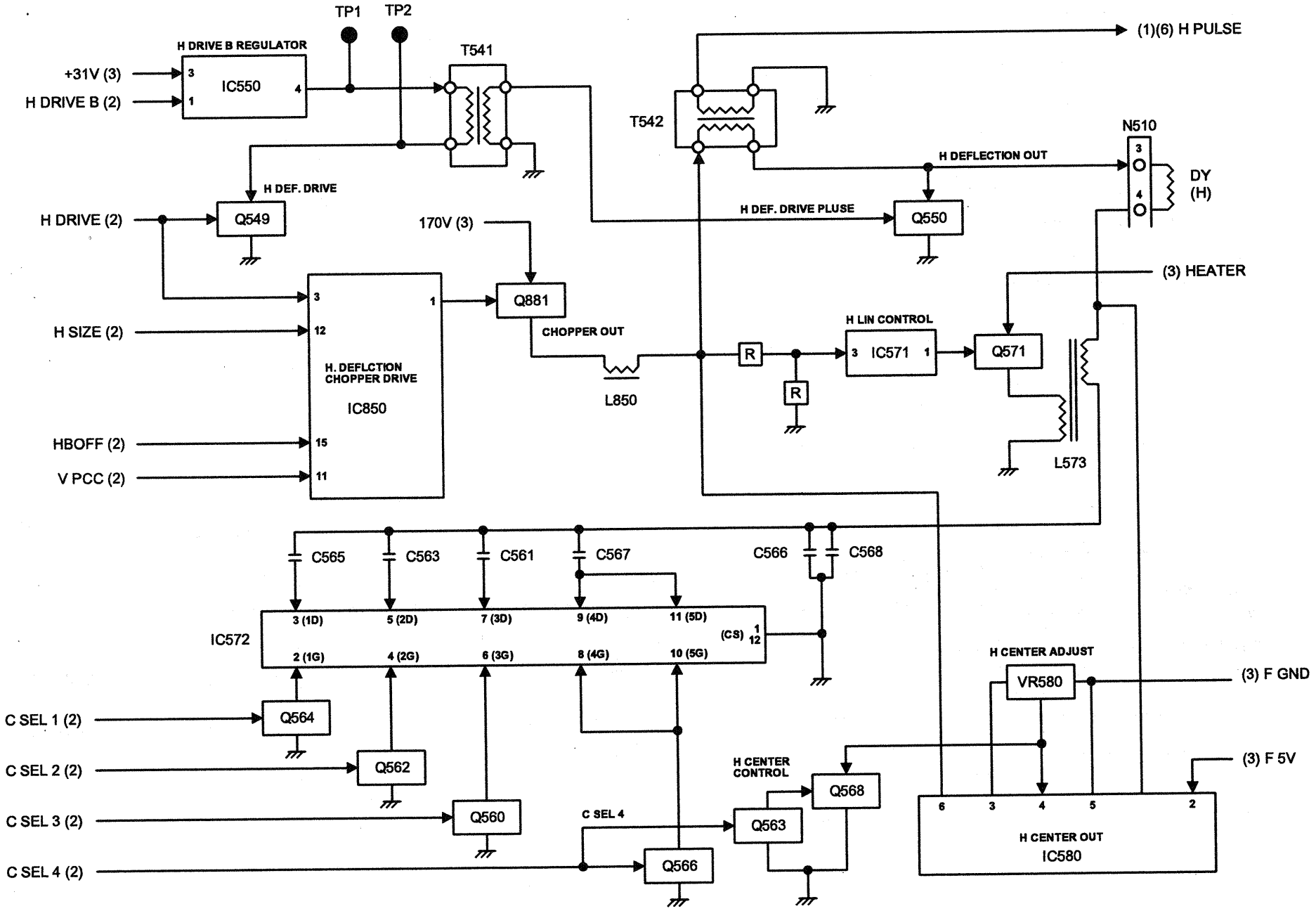
# SHEET (5) HV12Z - HORIZONTAL DEFLECTION



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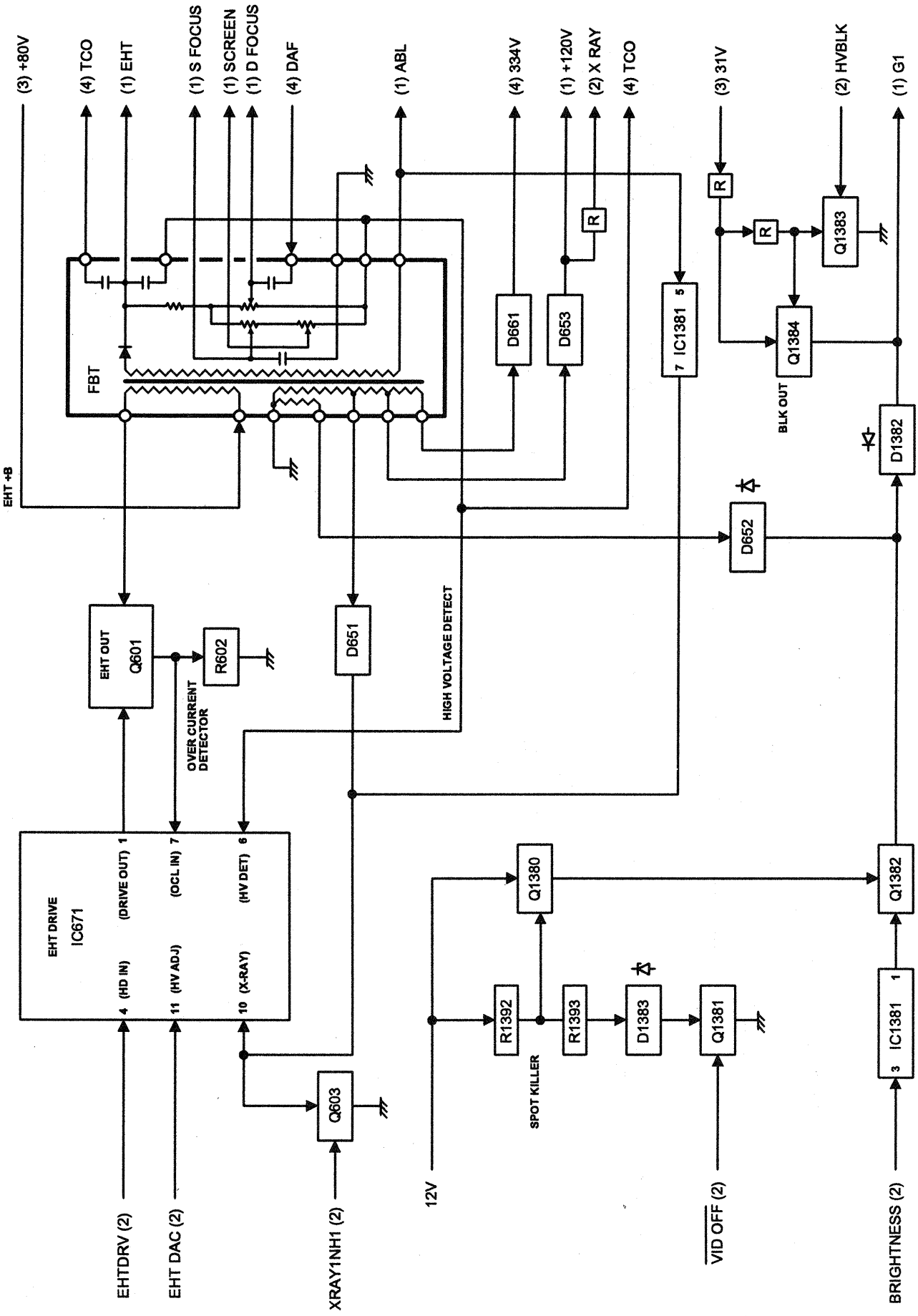
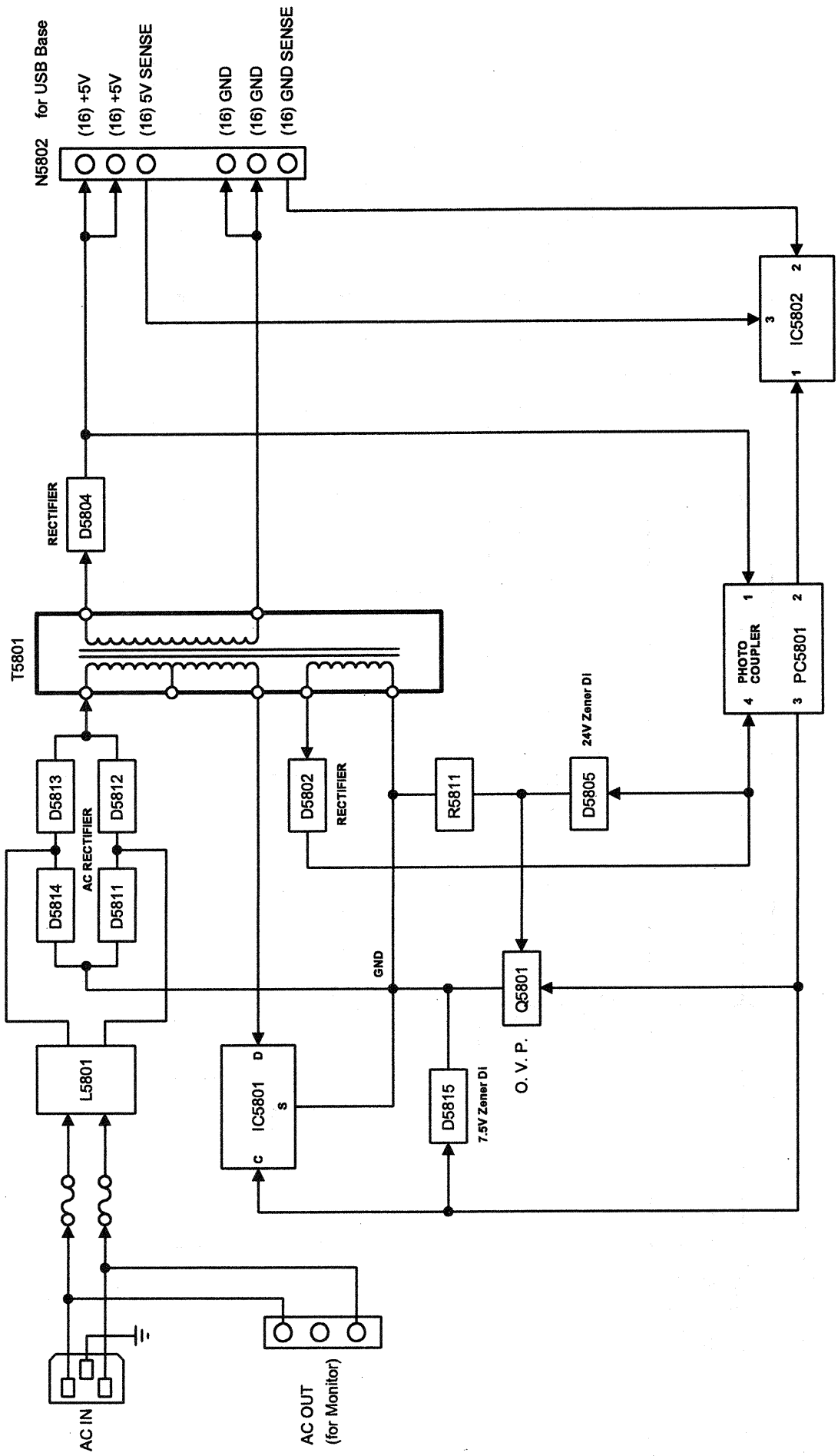
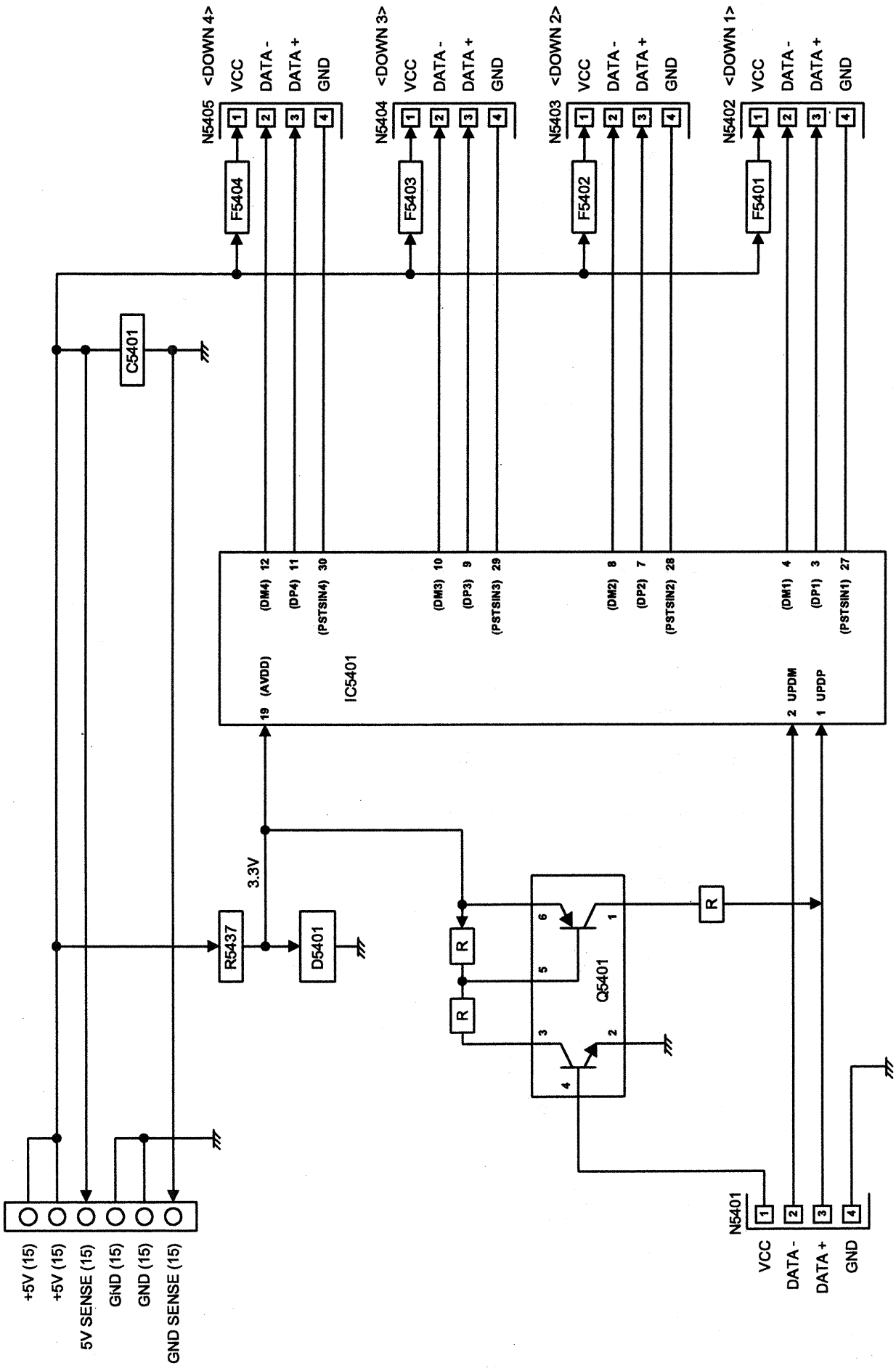

SHEET (6) HV12Z - EHT OUT
(3) +80V
(4) TCO
(1) EHT
(1) S FOCUS
(1) SCREEN
(1) D FOCUS
(4) DAF
(1) ABL
(4) 334V
(1) +120V
(2) X RAY
(4) TCO
(3) 31V
(2) HVBLK
(1) G1
FBT
EHT +B
D661
D653
7 IC1381 5
R
Q1383
Q1384
BLK OUT
D1382
D652
EHT OUT
Q601
R602
D651
OVER CURRENT DETECTOR
HIGH VOLTAGE DETECT
EHT DRIVE
IC671
(DRIVE OUT) 1
(OCL IN) 7
(HV DET) 6
4 (HD IN)
11 (HV ADJ)
10 (X-RAY)
Q1380
Q1382
R1392
R1393
D1383
Q1381
SPOT KILLER
3 IC1381 1
Q603
12V
VID OFF (2)
BRIGHTNESS (2)
EHTDRV (2)
EHT DAC (2)
XRAY1NH1 (2)

# SHEET (7) HV12Z - POWER SUPPLY for USB BASE



## SHEET (8) HV12Z - USB BASE





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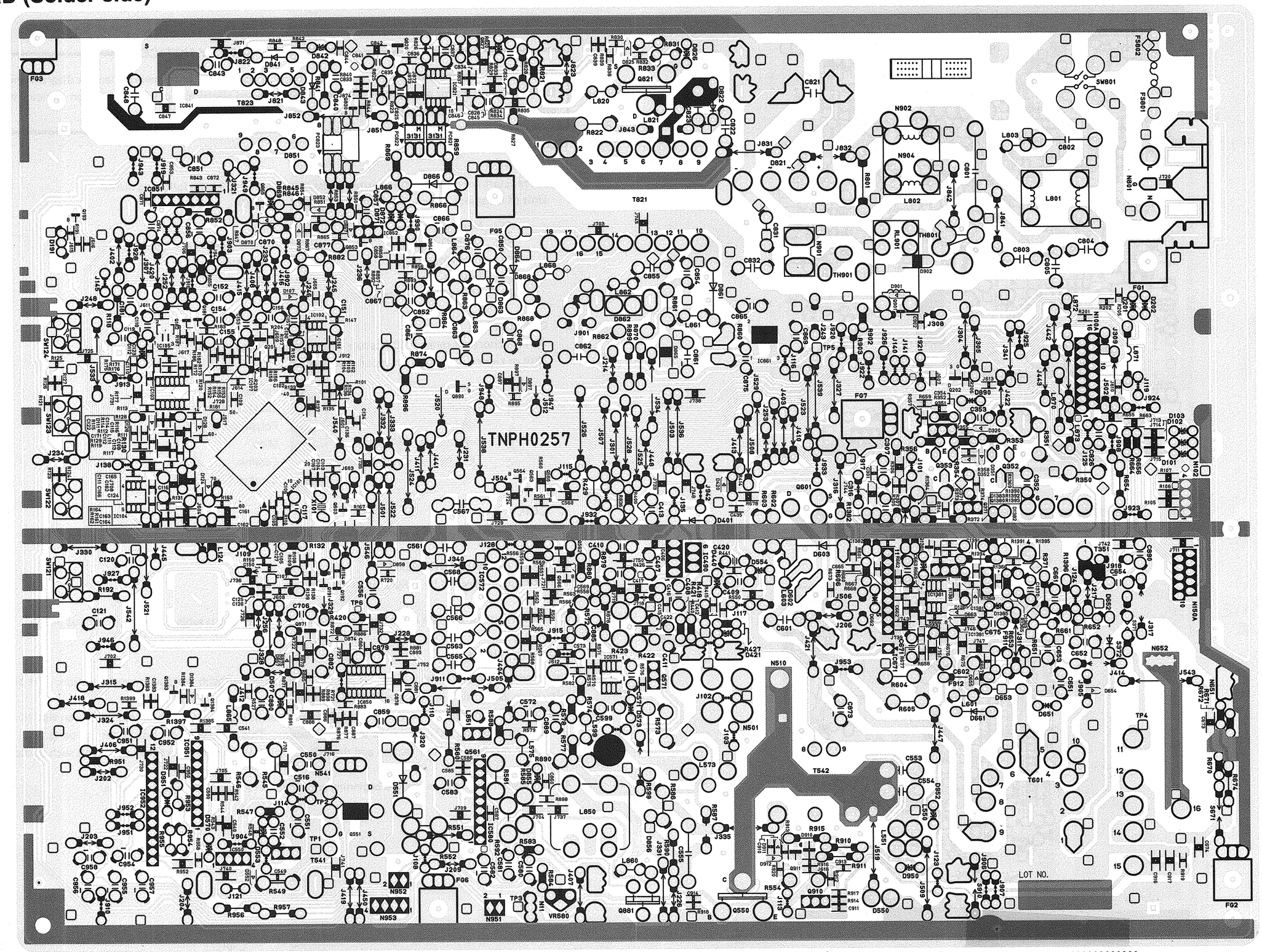
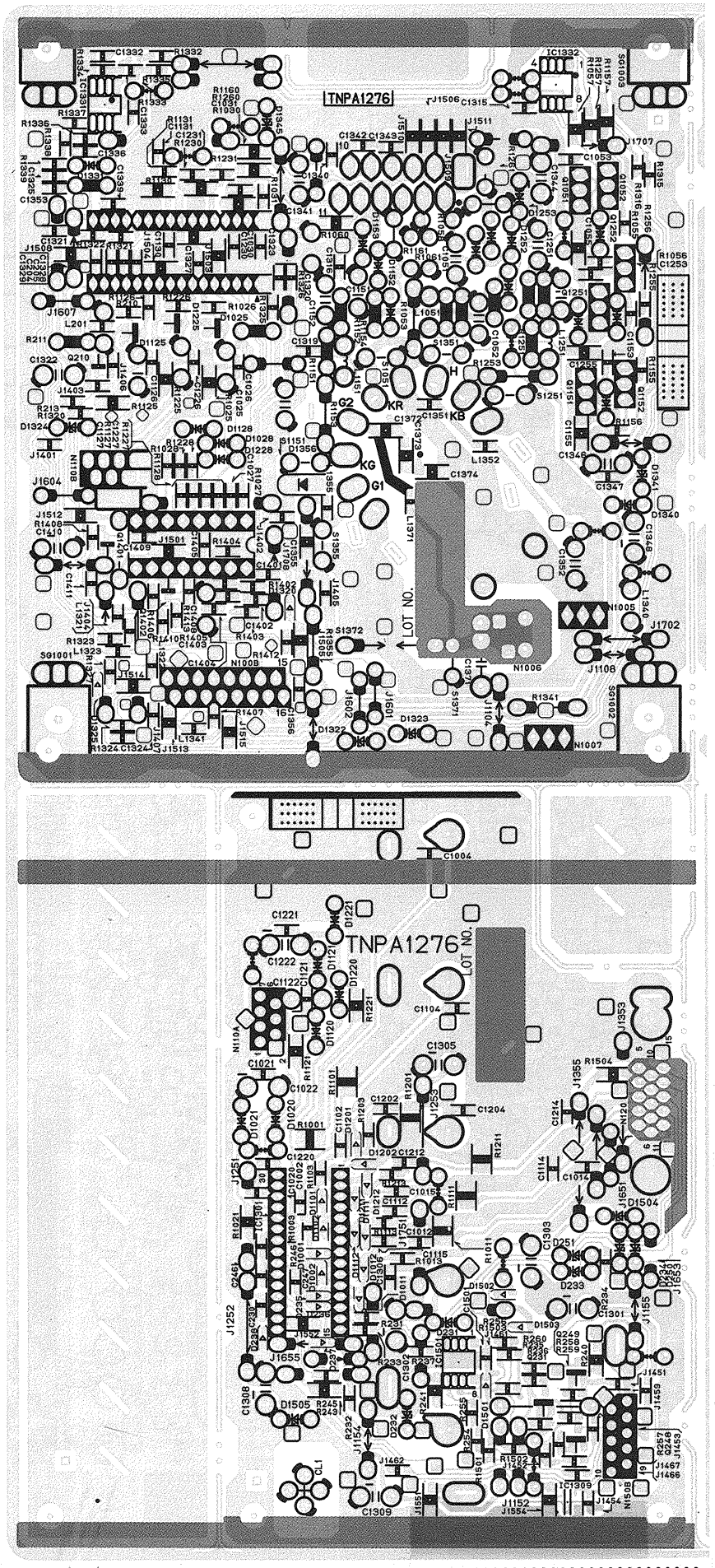
## MAIN BOARD (Solder side)



# VIDEO BOARD (Solder side)



# SCHEMATIC DIAGRAM

## IMPORTANT SAFETY NOTICE

The component identified by shading or international symbol ⚠ on the following schematic diagrams incorporate special features important for protection from X-Radiation, fire and electrical shock hazards. When servicing it is essential that only manufacturer's specified parts be used for those critical components.

## NOTES :

1. RESISTOR

All resistors are carbon 1/4W resistor, unless otherwise noted by the following marks.
Unit of resistance is ohm (Ω), (K = 1,000, M = 1,000,000)

- ◯ : Non Flammable
- ⊠ : Metal Oxide
- □ : Wire Wound
- ⊗ : Fusible
- ⧄ : Flame Proof Rectangular
- △ : Solid
- ◎ : Metal (Precision and high stability)
- : Thermistor
- : Positive coefficient Thermistor

2. CAPACITOR

All capacitors are ceramic 50V capacitor, unless otherwise noted by the following marks.
Unit of capacitance is μF, unless otherwise noted.

- : Electrolytic
- Ⓣ : Tantalum
- NP : Bipolar
- Ⓢ : Polystyrene
- ⊗ : Temperature Compensation
- Ⓜ : Polyester
- ⓜ : Metalized Polyester
- ⊠ : Polypropylene
- △ : Mica
- ◯ : Ceramic
- ◎ : Ceramic (SL)

3. COIL

Unit of inductance is μH, unless otherwise noted.

4. VOLTAGE MEASUREMENT

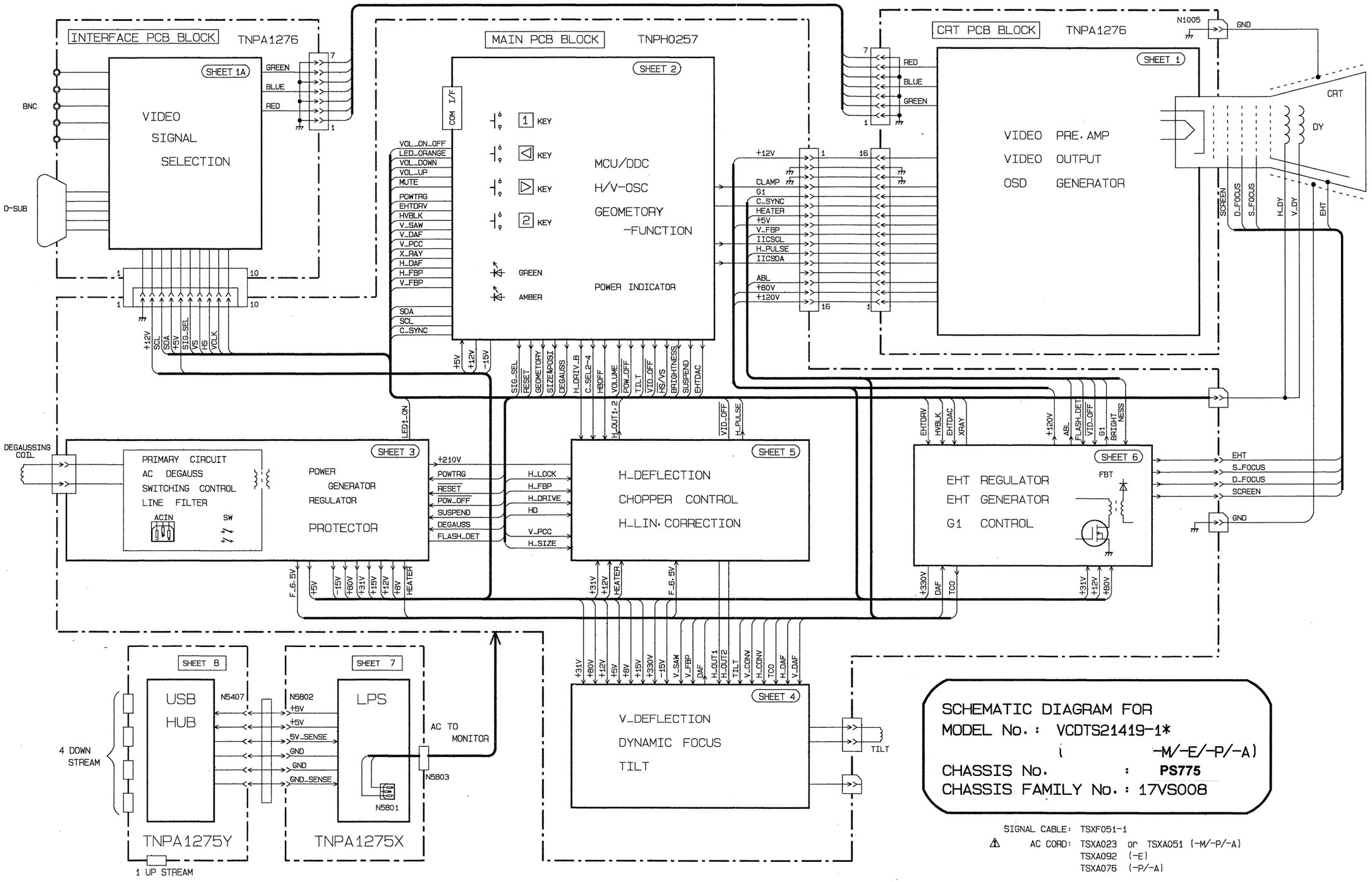
Voltage is measured by a digital meter receiving normal signal.

5. This schematic diagram is the letest at the time of printing and is subject to change without notice.

## SERVICE NOTES :

This model has a section that does not share a common ground with the power supply section. The different sections are referred to as the HOT section and the COLD section in the precautions below.

1. Do not touch the HOT section and the COLD section at the same time. You may receive an electric shock.
2. Do not short the HOT section to the COLD section. This could blow the fuse or damage parts.
3. Never measure the HOT section and the COLD section at the same time when using tools such as oscilloscopes or multimeters.
4. Always unplug the unit before beginning any operation such as removing the chassis.




SCHEMATIC DIAGRAM FOR
MODEL No. : VCDTS21419-1*
( -M/-E/-P/-A)
CHASSIS No. : **PS775**
CHASSIS FAMILY No. : 17VS008

SIGNAL CABLE: TSXF051-1
⚠ AC CORD: TSXA023 or TSXA051 (-M/-P/-A)
TSXA092 (-E)
TSXA076 (-P/-A)



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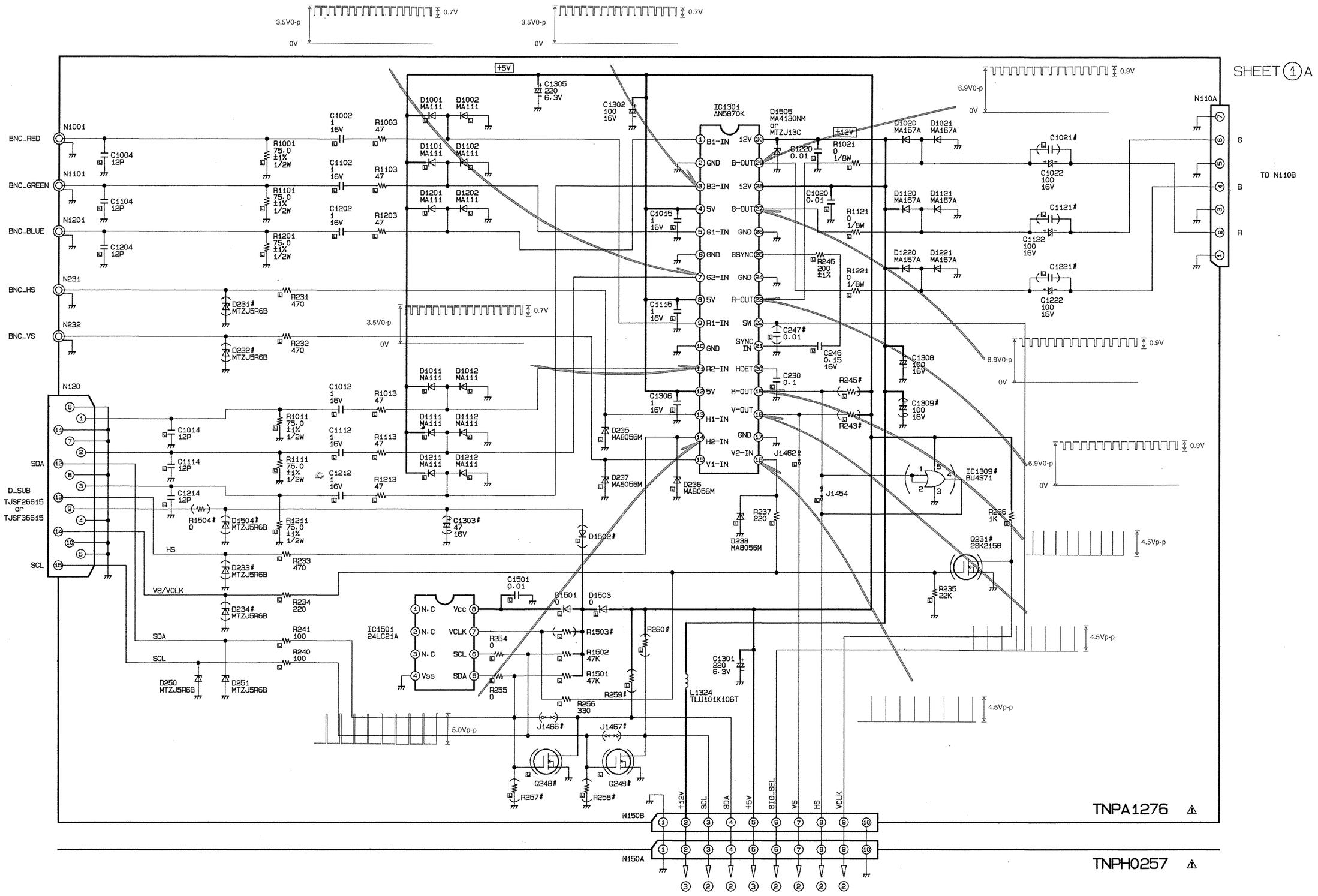
SHEET 1A
TO N110B
TNPA1276
TNPH0257
BNC_RED
BNC_GREEN
BNC_BLUE
BNC_HS
BNC_VS
D-SUB TJSF26615 or TJSF36615
SDA
SCL
HS
VS/VCLK
+5V
+12V
IC1301 AN5870K
IC1501 24LC21A
IC1309# BU4S71
L1324 TLU101K106T
N110A
N150B
N150A
3.5V0-p
0.7V
0V
6.9V0-p
0.9V
4.5Vp-p
5.0Vp-p

SHEET (1)

CY: TLCB011 DY: MEY41KHB1

TNPA1276

PS775



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SHEET ②

IC101
TVSA0307 or TVRB047-1 (TNPH0257-22/-31/-32)
TVSA0308 or TVRB049 (TNPH0257-21)

TNPH0257



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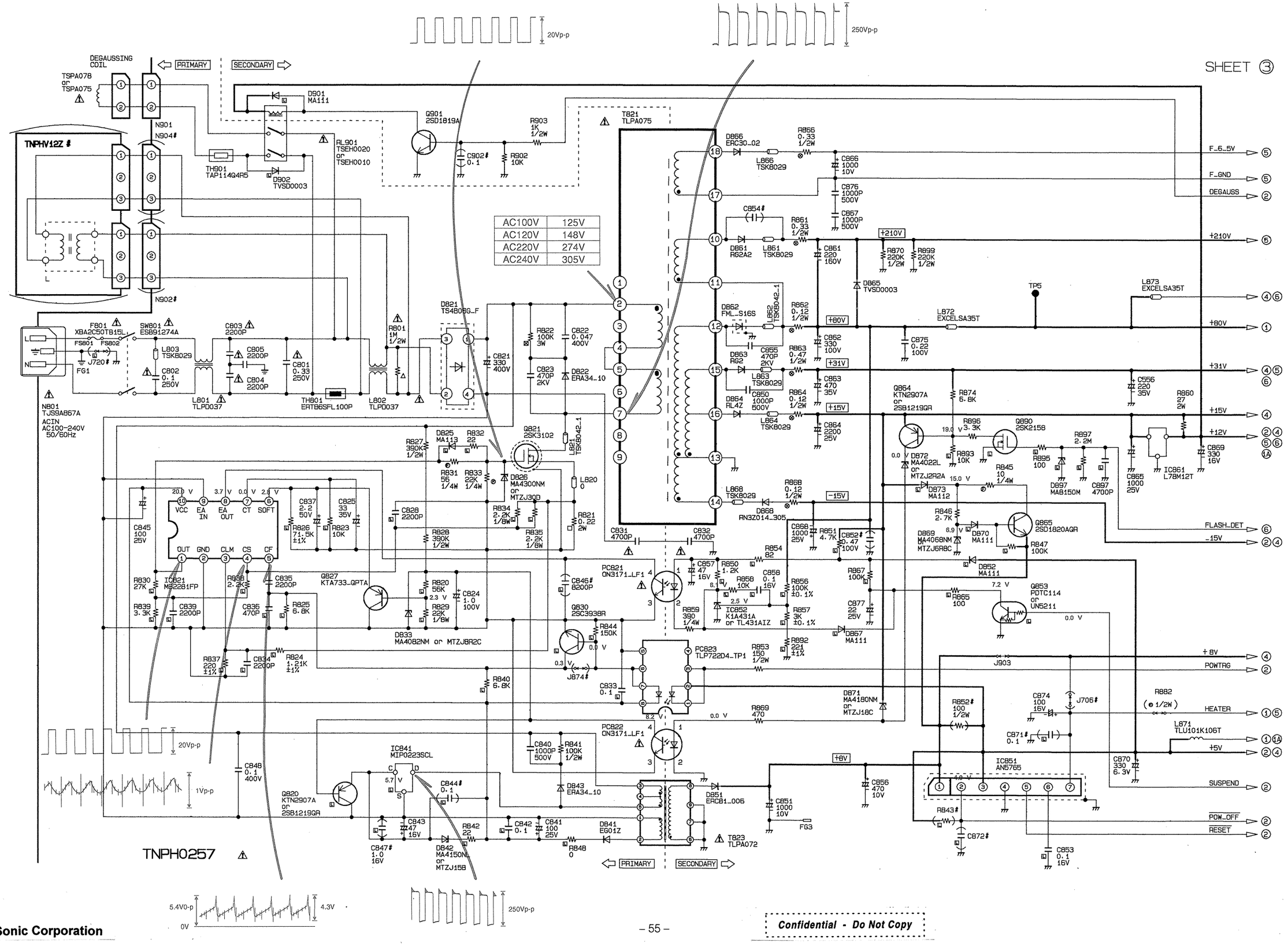
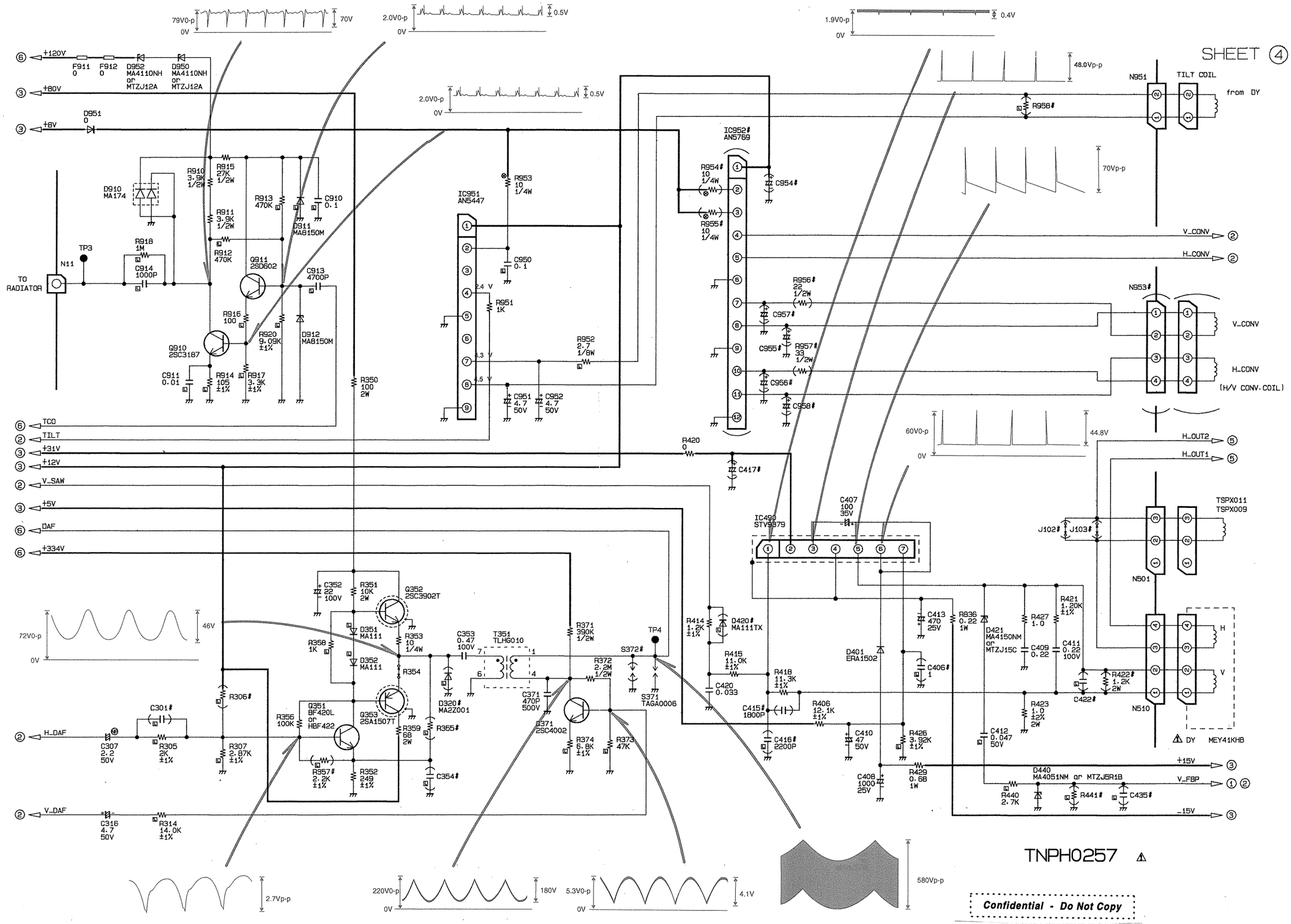

SHEET ③
20Vp-p
250Vp-p
DEGAUSSING COIL
PRIMARY
SECONDARY
TSPA078 or TSPA075
TNPHV12Z #
N901
N904#
N902#
D901 MA111
Q901 2SD1819A
R903 1K 1/2W
T821 TLPA075
RL901 TSEH0020 or TSEH0010
TH901 TAP114Q4R5
D902 TVSD0003
C902# 0.1
R902 10K
AC100V 125V
AC120V 148V
AC220V 274V
AC240V 305V
F801 XBA2C50TB15L
FS801 FS802
J720# FG1
SW801 ESB91274A
C803 2200P
C805 2200P
C804 2200P
C801 0.33 250V
C802 0.1 250V
L803 TSK8029
L801 TLP0037
L802 TLP0037
TH801 ERTB6SFL100P
R801 1M 1/2W
N801 TJS9A867A
ACIN AC100-240V 50/60Hz
D821 TS4806G_F
C821 330 400V
R822 100K 3W
C822 0.047 400V
C823 470P 2KV
D822 ERA34_10
L821 TSK6042_1
Q821 2SK3102
D825 MA113
R832 22
R827 390K 1/2W
R831 56 1/4W
R833 22K 1/4W
D826 MA4300NM or MTZJ30D
L820 0
R821 0.22 2W
R834 2.2K 1/8W
R835 2.2K 1/8W
C828 2200P
R828 390K 1/2W
C831 4700P
C832 4700P
C837 2.2 50V
C825 33 35V
R826 71.5K ±1%
R823 10K
C845 100 25V
IC821 M62281FP
R830 27K
R838 2.2K
C835 2200P
C836 470P
R825 6.8K
C839 2200P
R839 3.3K
Q827 KTA733_QPTA
R820 56K
R829 22K 1/8W
C824 1.0 100V
D833 MA4082NM or MTZJ8R2C
C846# 8200P
Q830 2SC3938R
R844 150K
J874#
PC821 ON3171_LF1
PC823 TLP722D4_TP1
R853 150 1/2W
R854 82
C857 47 16V
R850 1.2K
R858 10K
C858 0.1 16V
IC852 K1A431A or TL431AIZ
R856 100K ±0.1%
R857 3K ±0.1%
R859 390 1/4W
R892 221 ±1%
R867 100K
C877 22 25V
D867 MA111
R837 220 ±1%
C834 2200P
R824 1.21K ±1%
R840 6.8K
C833 0.1
R869 470
PC822 ON3171_LF1
C840 1000P 500V
R841 100K 1/2W
IC841 MIP0223SCL
Q820 KTN2907A or 2SB1219QR
C844# 0.1
C843 47 16V
C847# 1.0 16V
D842 MA4150NL or MTZJ15B
RB42 22
C842 0.1
C841 100 25V
R848 0
D841 EG01Z
D843 ERA34_10
T823 TLPA072
D851 ERC81_006
C851 1000 10V
FG3
C848 0.1 400V
D856 ERC30_02
L866 TSK8029
R866 0.33 1/2W
C866 1000 10V
C876 1000P 500V
C867 1000P 500V
C854#
R861 0.33 1/2W
D861 R62A2
L861 TSK8029
C861 220 160V
+210V
R870 220K 1/2W
R899 220K 1/2W
D865 TVSD0003
TP5
L873 EXCELSA35T
L872 EXCELSA35T
D862 FML_S16S
L862 TSK6042_1
R862 0.12 1/2W
+80V
C862 330 100V
C875 0.22 100V
C855 470P 2KV
D863 RG2
R863 0.47 1/2W
+31V
L863 TSK8029
C863 470 35V
C850 1000P 500V
D864 RL4Z
R864 0.12 1/2W
+15V
L864 TSK8029
C864 2200 25V
Q864 KTN2907A or 2SB1219QR
R874 6.8K
R896 3.3K
R893 10K
Q890 2SK2158
R845 10 1/4W
R895 100
R897 2.2M
D872 MA4022L or MTZJ2R2A
D873 MA112
D897 MAB150M
C897 4700P
C556 220 35V
R860 37 2W
C865 1000 25V
IC861 L78M12T
C869 330 16V
R868 0.12 1/2W
-15V
D868 RN3Z014_305
L868 TSK8029
C868 1000 25V
R851 4.7K
C852# 0.47 100V
R846 2.7K
D869 MA4068NM MTZJ6R8C
Q865 2SD1820AQR
R847 100K
D870 MA111
D852 MA111
R865 100
Q853 PDTC114 or UN5211
J903
D871 MA4180NM or MTZJ18C
R852# 100 1/2W
C874 100 16V
J706#
R882 (1/2W)
C871# 0.1
L871 TLU101K106T
+5V
C870 330 6.3V
IC851 AN5765
C856 470 10V
R843#
C872#
C853 0.1 16V
F_6_5V
F_GND
DEGAUSS
+210V
+80V
+31V
+15V
+12V
FLASH_DET
-15V
+8V
POWTRG
HEATER
SUSPEND
POW_OFF
RESET
TNPH0257
20Vp-p
1Vp-p
5.4V0-p
0V
4.3V
250Vp-p


SHEET ④
+120V
+80V
+8V
D951
F911 0
F912 0
D952 MA4110NH or MTZJ12A
D950 MA4110NH or MTZJ12A
79V0-p
70V
0V
2.0V0-p
0.5V
1.9V0-p
0.4V
48.0Vp-p
N951
TILT COIL
from DY
R958#
70Vp-p
IC952# AN5769
R954# 10 1/4W
R955# 10 1/4W
C954#
V_CONV
H_CONV
N953#
R956# 22 1/2W
C957#
R957# 33 1/2W
C956#
C958#
V_CONV
H_CONV
(H/V CONV. COIL)
60V0-p
44.8V
H_OUT2
H_OUT1
TSPX011
TSPX009
J102#
J103#
N501
N510
H
V
DY
MEY41KHB
R910 3.9K 1/2W
R915 27K 1/2W
R911 3.9K 1/2W
R912 470K
R913 470K
C910 0.1
D911 MA8150M
D910 MA174
R918 1M
C914 1000P
TP3
N11
TO RADIATOR
Q911 2SD602
C913 4700P
R916 100
R920 9.09K ±1%
D912 MA8150M
Q910 2SC3187
C911 0.01
R914 105 ±1%
R917 3.3K ±1%
R350 100 2W
IC951 AN5447
R953 10 1/4W
C950 0.1
2.4 V
R951 1K
4.3 V
4.5 V
R952 2.7 1/8W
C951 4.7 50V
C952 4.7 50V
R420 0
C417#
C407 100 35V
IC493 STV9379
TCO
TILT
+31V
+12V
V_SAW
+5V
DAF
+334V
H_DAF
V_DAF
C307 2.2 50V
C301#
R305 2K ±1%
R306#
R307 2.87K ±1%
C316 4.7 50V
R314 14.0K ±1%
Q351 BF420L or HBF422
R356 100K
R357# 2.2K ±1%
Q353 2SA1507T
R359 68 2W
R355#
R352 249 ±1%
C354#
C352 22 100V
R351 10K 2W
Q352 2SC3902T
D351 MA111
D352 MA111
R358 1K
R353 10 1/4W
R354
C353 0.47 100V
T351 TLH6010
D320# MA2Z001
R371 390K 1/2W
TP4
S372#
S371 TAGA0006
C371 470P 500V
Q371 2SC4002
R372 2.2M 1/2W
R374 6.8K ±1%
R373 47K
R414 1.2K ±1%
D420# MA111TX
R415 11.0K ±1%
C420 0.033
C415# 1800P
R418 11.3K ±1%
R406 12.1K ±1%
C416# 2200P
D401 ERA1502
C413 470 25V
R836 0.22 1W
C406# 1
C410 47 50V
R426 3.92K ±1%
R429 0.68 1W
C408 1000 25V
D421 MA4150NM or MTZJ15C
C412 0.047 50V
R427 1.0
C409 0.22
R421 1.20K ±1%
C411 0.22 100V
R422# 1.2K 2W
C422#
R423 1.0 ±2% 2W
+15V
V_FBP
-15V
D440 MA4051NM or MTZJ5R1B
R440 2.7K
R441#
C435#
72V0-p
46V
0V
2.7Vp-p
220V0-p
180V
5.3V0-p
4.1V
580Vp-p
TNPH0257 ⚠
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| fH | Value |
|---|---|
| 68.7kHz | 23.6V |
| 31.5kHz | 23.9V |
| 43.3kHz | 23.7V |
| 53.7kHz | 24.2V |
| 49.7kHz | 25.1V |
| 56.5kHz | 23.4V |
| 60.2kHz | 23.3V |
| 91.1kHz | 22.6V |

| fH | Value |
|---|---|
| 68.7kHz | 99.5V |
| 31.5kHz | 43.8V |
| 43.3kHz | 59.5V |
| 53.7kHz | 77.3V |
| 49.7kHz | 73.4V |
| 56.5kHz | 78.8V |
| 60.2kHz | 84.5V |
| 91.1kHz | 133.1V |

TNPH0257

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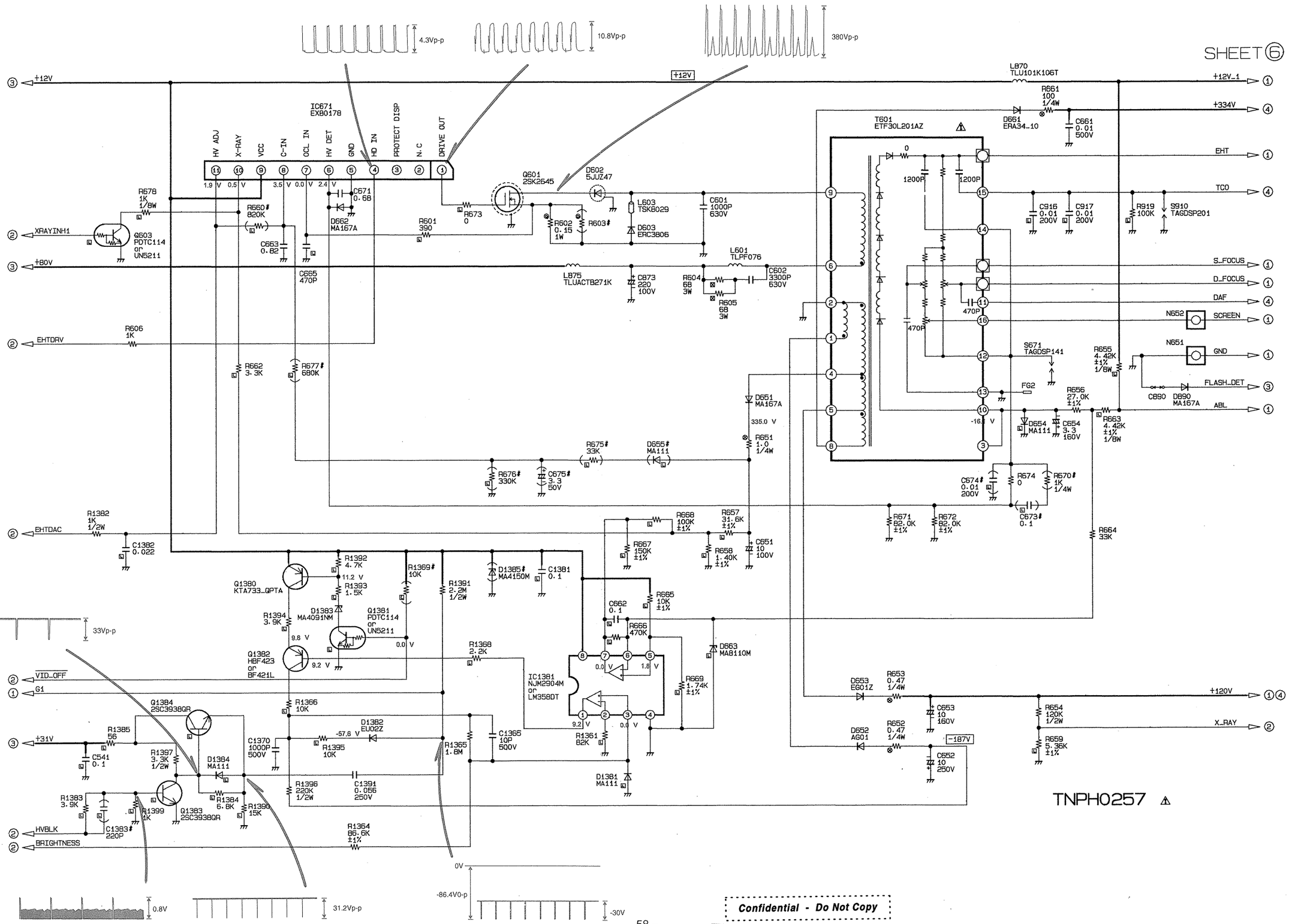


TNPH0257 ⚠

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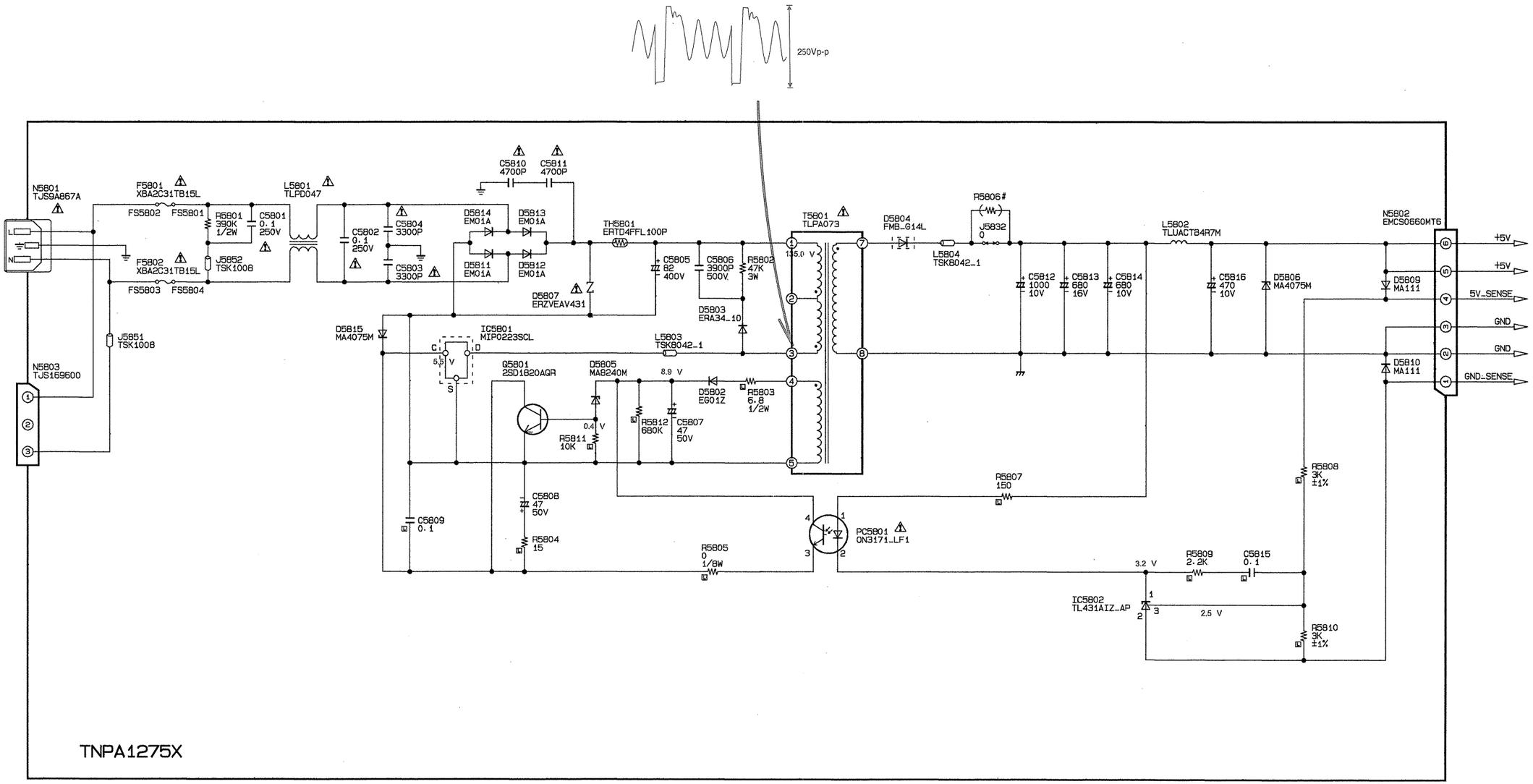
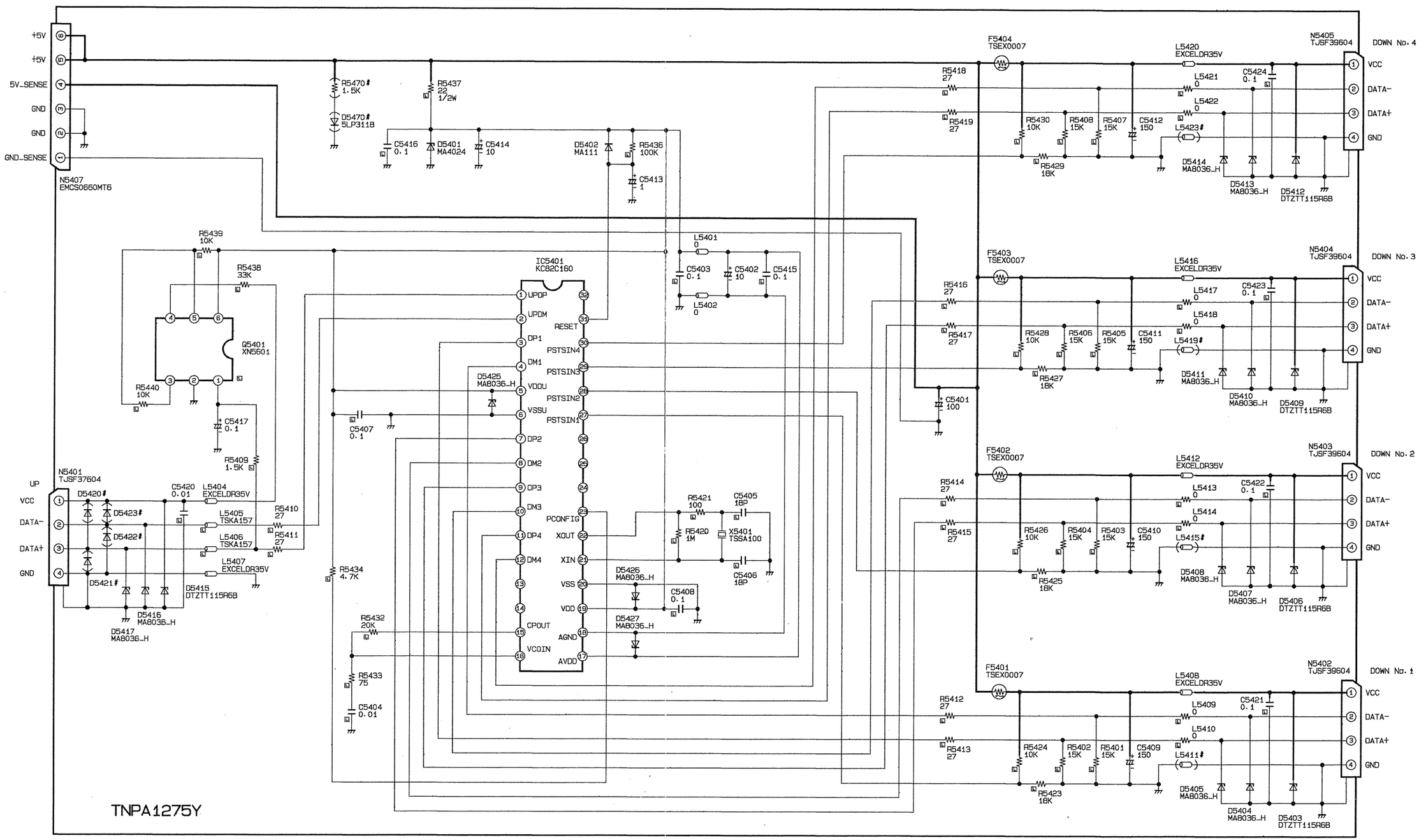

250Vp-p
N5801
TJS9A867A
F5801
XBA2C31TB15L
FS5802
FS5801
R5801
390K
1/2W
C5801
0.1
250V
L5801
TLPD047
C5802
0.1
250V
C5804
3300P
C5803
3300P
J5852
TSK1008
F5802
XBA2C31TB15L
FS5803
FS5804
J5851
TSK1008
N5803
TJS169600
C5810
4700P
C5811
4700P
D5814
EM01A
D5813
EM01A
D5811
EM01A
D5812
EM01A
TH5801
ERTD4FFL100P
D5807
ERZVEAV431
C5805
82
400V
C5806
3900P
500V
R5802
47K
3W
D5803
ERA34_10
T5801
TLPA073
115.0 V
D5804
FMB_G14L
R5806#
0
J5832
L5804
TSK8042_1
L5802
TLUACT84R7M
C5812
1000
10V
C5813
680
16V
C5814
680
10V
C5816
470
10V
D5806
MA4075M
N5802
EMCS0660MT6
D5809
MA111
D5810
MA111
+5V
+5V
5V_SENSE
GND
GND
GND_SENSE
D5815
MA4075M
IC5801
MIP0223SCL
C
D
S
5.5 V
L5803
TSK8042_1
Q5801
2SD1820AGR
D5805
MA8240M
8.9 V
D5802
EG01Z
R5803
6.8
1/2W
0.4 V
R5811
10K
R5812
680K
C5807
47
50V
C5808
47
50V
C5809
0.1
R5804
15
R5805
0
1/8W
R5807
150
PC5801
ON3171_LF1
R5808
3K
±1%
3.2 V
R5809
2.2K
C5815
0.1
IC5802
TL431AIZ_AP
2.5 V
R5810
3K
±1%

TNPA1275X

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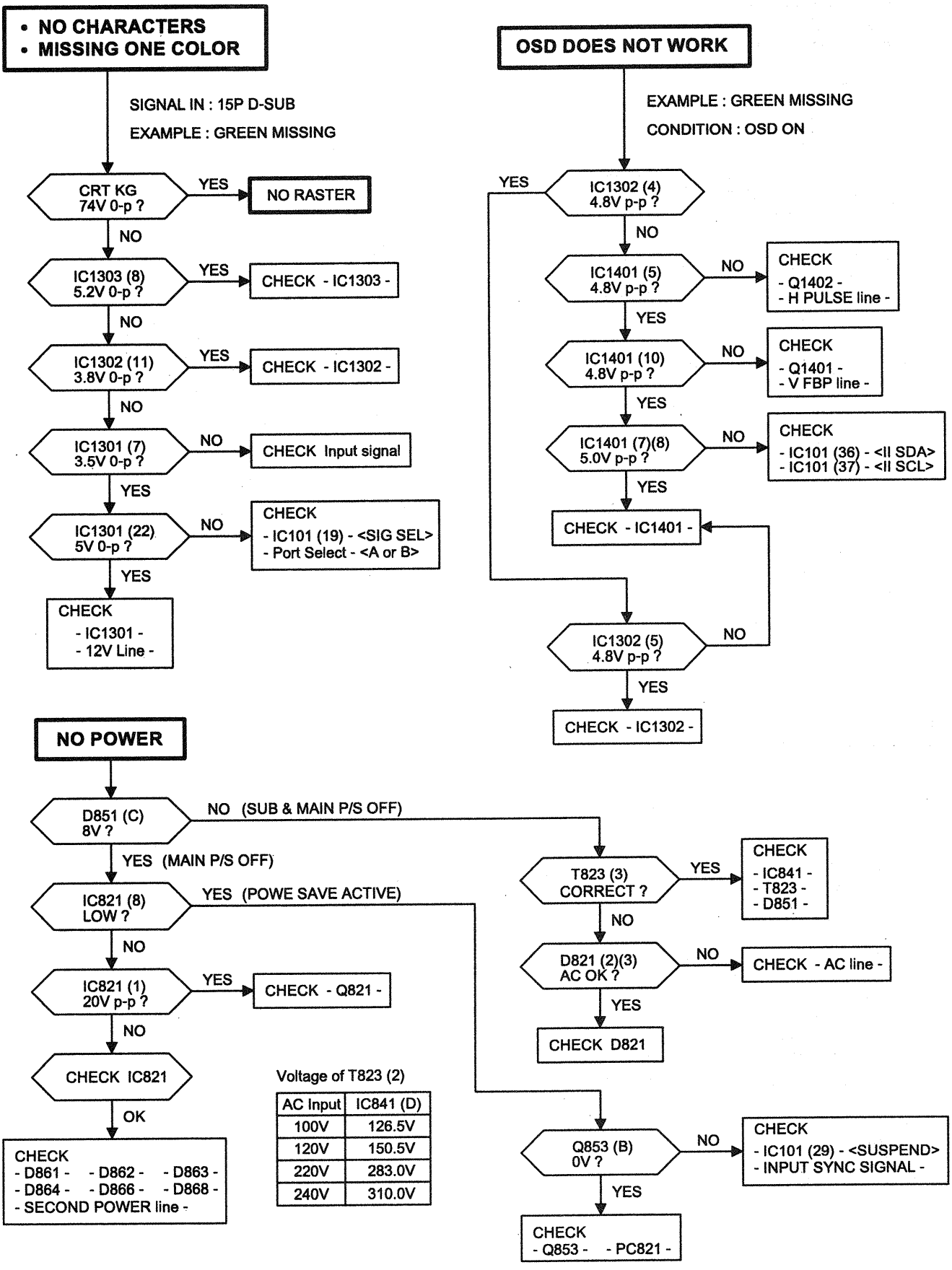
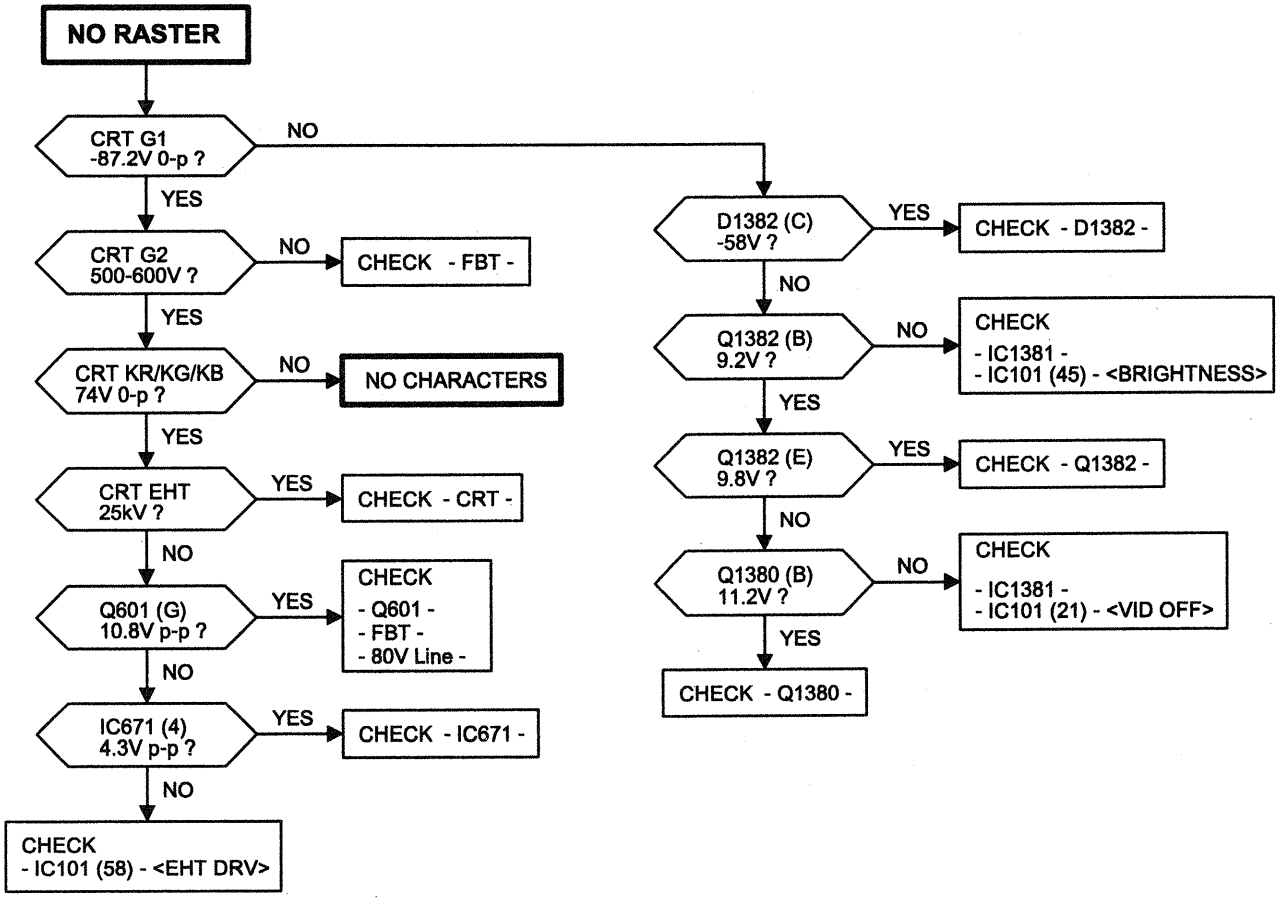
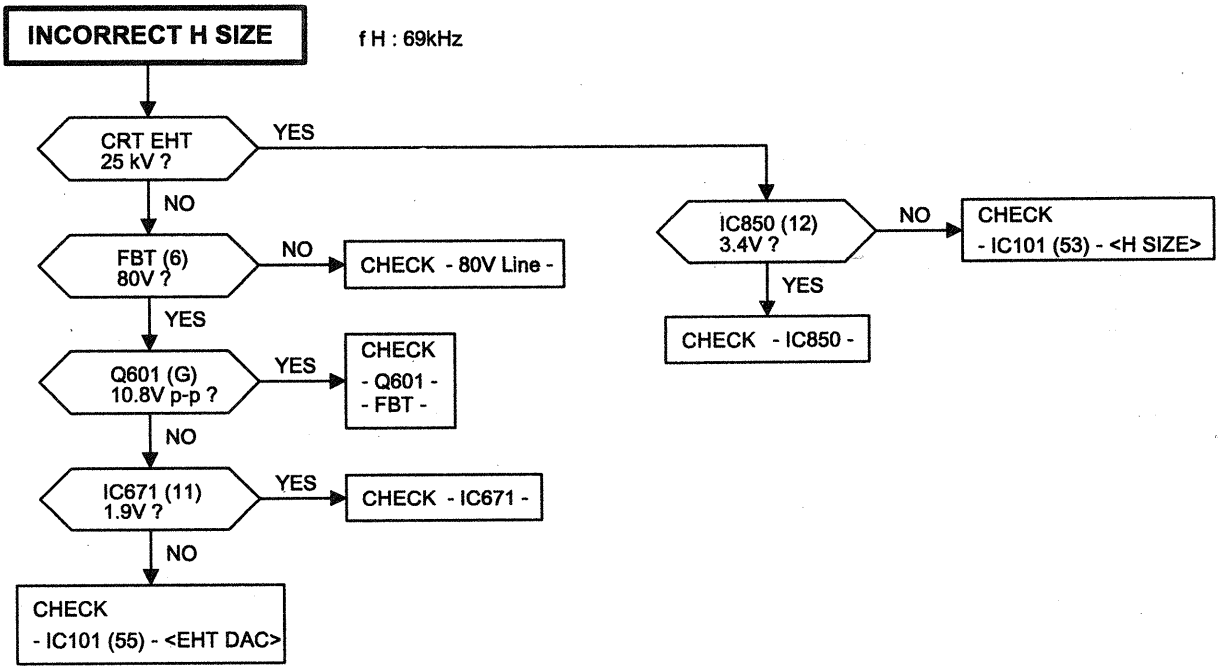
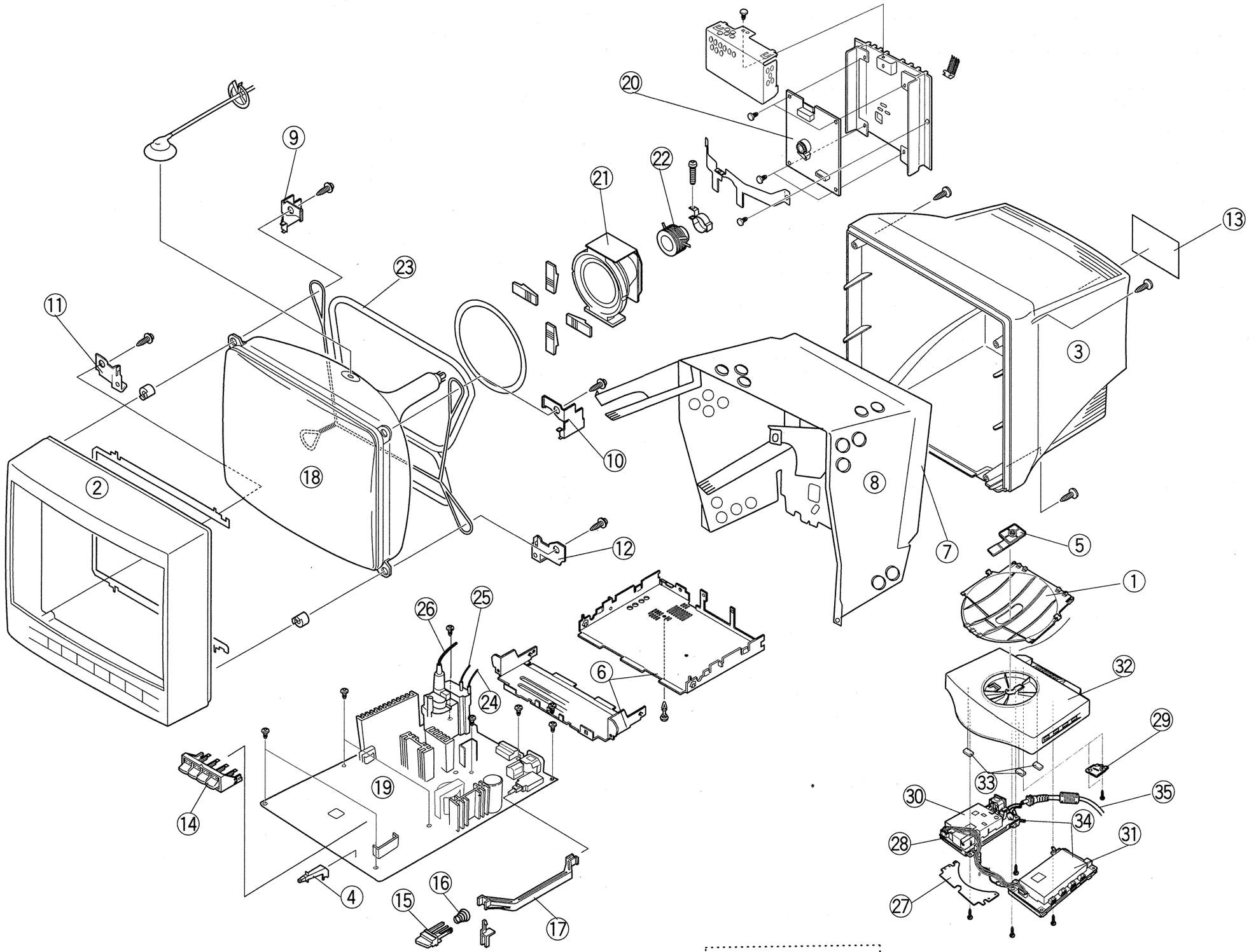
# TROUBLE SHOOTING HINTS




NO RASTER
CRT G1 -87.2V 0-p ?
NO
YES
CRT G2 500-600V ?
NO
CHECK - FBT -
YES
CRT KR/KG/KB 74V 0-p ?
NO
NO CHARACTERS
YES
CRT EHT 25kV ?
YES
CHECK - CRT -
NO
Q601 (G) 10.8V p-p ?
YES
CHECK - Q601 - - FBT - - 80V Line -
NO
IC671 (4) 4.3V p-p ?
YES
CHECK - IC671 -
NO
CHECK - IC101 (58) - <EHT DRV>
D1382 (C) -58V ?
YES
CHECK - D1382 -
NO
Q1382 (B) 9.2V ?
NO
CHECK - IC1381 - - IC101 (45) - <BRIGHTNESS>
YES
Q1382 (E) 9.8V ?
YES
CHECK - Q1382 -
NO
Q1380 (B) 11.2V ?
NO
CHECK - IC1381 - - IC101 (21) - <VID OFF>
YES
CHECK - Q1380 -


INCORRECT H SIZE
f H : 69kHz
CRT EHT 25 kV ?
YES
NO
FBT (6) 80V ?
NO
CHECK - 80V Line -
YES
Q601 (G) 10.8V p-p ?
YES
CHECK - Q601 - - FBT -
NO
IC671 (11) 1.9V ?
YES
CHECK - IC671 -
NO
CHECK - IC101 (55) - <EHT DAC>
IC850 (12) 3.4V ?
NO
CHECK - IC101 (53) - <H SIZE>
YES
CHECK - IC850 -

# EXPLODED VIEW



# REPLACEMENT PARTS LIST

**Important Safety Notice**

Components identified by the International symbol ⚠ have special characteristics important for safety. When replacing any of these components use only manufacture's specified parts.

RESISTOR

| PART NAME & DESCRIPTION | | | |
|---|---|---|---|
| TYPE | | ALLOWANCE | |
| C | Carbon | F | ± 1% |
| F | Fuse | J | ± 5% |
| M | Metal Oxide | K | ± 10% |
| S | Solid | M | ± 20% |
| W | Wire Wound | G | ± 2% |

Part No. Description

Example: ERD25TJ104 (C) 100K (J) 1/4W

**NOTE**

When ordering a flyback transformer, the focus lead (red / white) and the anode lead should also be ordered, without fail.

CAPACITOR

| PART NAME & DESCRIPTION | | | |
|---|---|---|---|
| TYPE | | ALLOWANCE | |
| C | Ceramic | C | ± 0.25pF |
| E | Electrolytic | D | ± 0.5pF |
| P | Polyester | F | ± 1pF |
| S | Styrol | J | ± 5% |
| T | Tantalum | K | ± 10% |
| PP | Polypropylene | L | ± 15% |
| | | M | ± 20% |
| | | P | +100% – 0% |
| | | Z | +80% – 20% |

Part No. Description

Example: ECKF1H103ZF (C) 0.01µF (Z) 50V

| | Ref.No. | Part No. | Description |
|---|---|---|---|
| | | | CABINET & MAIN PARTS |
| ⚠ | 1 | TKYA0940 2 | BOTTOM CABINET |
| ⚠ | 2 | TTEA00761-2 | ESCUTCHEON |
| ⚠ | 3 | TKUC0460 4 | REAR COVER |
| ⚠ | 4 | TKKC5053 | LED GUIDE |
| ⚠ | | TKK859745-9 | CONNECTOR COVER |
| ⚠ | 5 | TKK859980 | CENTER POST |
| | 6 | TUAA0540 2 | BOTTOM PLATE |
| | | TUXA111 | HEAT SINK HOLDER |
| | | TSPX002 | RADIATOR |
| | 7 | TUCC5255-1 | SHIELD CASE(REAR) |
| | 8 | TUCC5413-1 | SHIELD CASE |
| | 9 | TUCX5031-1 | EARTH METAL(R-UPPER) |
| | 10 | TUCX5032-1 | EARTH METAL(L-UPPER) |
| | 11 | TUCX5039 | EARTH METAL(R-UNDER) |
| | 12 | TUCX5040 | EARTH METAL(L-UNDER) |
| | | TUCX5065 | SHIELD METAL(R) |
| | | TUCX5066 | SHIELD METAL(L) |
| ⚠ | 13 | TBMD415 | MODEL NAME LABEL<-M,-E> |
| ⚠ | 13 | TBMD415-1 | MODEL NAME LABEL<-P> |
| ⚠ | 14 | TBXA03611 | KNOB(CONTROL) |
| ⚠ | 15 | TBXA1350 1 | KNOB(POWER SWITCH) |
| | | TESA043 | SPRING(CRT EARTH) |
| | 16 | TESD012 | SPRING(POWER SWITCH) |
| ⚠ | | TMME034 | PC BOARD SPACER |
| ⚠ | | TMMJ011 | WEDGE RUBBER(BIG) |
| ⚠ | | TMM15404-1 | SPACER RING |
| ⚠ | | TMM6463 | CLAMPER |
| | | TMM85576-1 | CRT RUBBER |
| ⚠ | | TMXA010 | POWER SWITCH SHAFT GUIDE |
| ⚠ | | TMXA011-2 | POWER SWITCH SHAFT SPACER |
| ⚠ | | TMXE009 | PC BOARD GUIDE |
| ⚠ | 17 | TMXJ007 | POWER SWITCH SHAFT |
| ⚠ | | TMKE095 | FERRITE STICK(STRONG) |
| ⚠ | | TMKE126 | FERRITE STICK(WEAK) |
| ⚠ | | TMKG032 | CRT RUBBER |
| ⚠ | | TMKG035 | SPONGE(FOR RADIATOR) |
| ⚠ | | TMKG099 | SPONGE |
| | | THTF002U | SCREW(FOR AC INLET) |
| | | THT1027 | SCREW(FOR CRT) |
| | | THT1069 | SCREW(FOR SHIELD CASE) |
| | | XTN5+16LY | SCREW |
| | | XTV3+10A | SCREW |
| | | XTV3+8J | SCREW |
| | | XTW3+8T | SCREW |
| | | XYA4+EF8 | SCREW |
| ⚠ | 18 | M41LJV007X-G | COLOR PICTURE TUBE |
| ⚠ | 19 | TNPH0257-21 | PC BOARD W/COMPONENT (MAIN) |
| | 20 | TXANP3S55VUM | PC BOARD W/COMPONENT (VIDEO INPUT/CRT) |
| ⚠ | 21 | MEY41KHB1 | DEFLECTION YOKE |
| ⚠ | 22 | TLCB011 | CONVERGENCE COIL |
| ⚠ | 23 | TSPA075 | DEGAUSS COIL |
| ⚠ | | TSPX011 | VLMF COIL |
| ⚠ | | TSXA051 | POWER CORD<-M.-P> |
| ⚠ | | TSXA076 | POWER CORD<-P> |
| ⚠ | | TSXA092 | POWER CORD<-E> |
| | | TSXF051-1 | SIGNAL CORD |
| | | TSXF154 | USB CORD |
| | | TSXL056 | FLAT CORD(7P) |
| | | TSXL091 | FLAT CORD(16P) |
| ⚠ | 24 | TSXX064-1 | FOCUS LEAD(RED) |
| ⚠ | 25 | TSXX065-1 | FOCUS LEAD(WHITE) |
| ⚠ | | TSXX073-1 | 1P TERMINAL ASSY |
| | | TSXX111 | SCREEN LEAD |
| ⚠ | | TSXX112 | 1P LEAD ASSY(RED) |
| ⚠ | | TXA3A1S55VUM | CRT EARTH LEAD |
| | | TSMA002 | MAGNET |
| ⚠ | 26 | TLFN05300 | ANODE LEAD |
| | | T4F31519Q | POLYESTER TAPE(50M) |
| | | T4F72425Q | COTTON TAPE(55M) |



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| | Ref.No. | Part No. | Description |
|---|---|---|---|
| | | T4F90226-2 | MAIRA TAPE(30M) |
| | | TPCA68301 | OUTER CARTON |
| | | TXAPD2D7S55B | FILLER(BOTTOM) |
| | | TXAPD2M7S35T | FILLER(TOP) |
| | | TPE814109-2 | SET COVER |
| | | TQE8513-2 | FUN BAG COVER |
| | | TQBE0151 | INSTRUCTION BOOK(TC095) |
| ⚠ | | TQBE0294 | INSTRUCTION BOOK<-M> |
| ⚠ | | TQBE0319 | INSTRUCTION BOOK<-E> |
| ⚠ | | TQBE0320 | INSTRUCTION BOOK<-P> |
| | | TQFA343 | BAR CODE LABEL |
| | | TQFA360 | WARNING LABEL |
| | | TQF83825-6 | SERIAL NO. LABEL |
| | | TQF85363-1 | CARTON LABEL<-M> |
| | | TQF85363-8 | CARTON LABEL<-E> |
| | | TQF85363-10 | CARTON LABEL<-P> |
| | | TQF86553 | PTB LABEL(INNER) |
| ⚠ | | TQF86608 | EARTH CAUTION LABEL |
| | | I.C | |
| | IC101 | TVRB049 | IC |
| | IC102 | 24LC08BTISN | IC |
| | IC103 | LF347MX | IC |
| | IC104 | NJM2904M | IC |
| | IC107 | BU4S584 | IC |
| | IC490 | STV9379 | IC |
| | IC550 | AN6531 | IC |
| | IC571 | NJM2904M | IC |
| | IC580 | AN5764 | IC |
| | IC671 | EXB0178 | HYBRID IC |
| | IC821 | M62281FP | IC |
| | IC841 | MIP0223SCL | IC |
| | IC850 | AN5757S | IC |
| | IC851 | AN5765 | IC |
| | IC852 | KIA431A-AT | IC |
| | IC861 | L78M12T | IC |
| | IC951 | AN5447 | IC |
| | IC1301 | AN5870K | IC |
| | IC1302 | M52745SP | IC |
| | IC1303 | LM2403T | IC |
| | IC1331 | NJM2904M | IC |
| | IC1332 | M62334FP | IC |
| | IC1381 | NJM2904M | IC |
| | IC1401 | LSC4504P2 | IC |
| | IC1501 | 24LC21ATISN | IC |
| | | TRANSISTORS | |
| | IC572 | SLA5046 | TRANSISTOR |
| | Q181 | 2SC3938R | TRANSISTOR |
| | Q182 | 2SC3938R | TRANSISTOR |
| | Q191 | PDTA114EU | TRANSISTOR |
| | Q192 | PDTC114EU | TRANSISTOR |
| | Q201 | 2SK2158M | TRANSISTOR |
| | Q202 | 2SK2158M | TRANSISTOR |
| | Q231 | 2SK2158M | TRANSISTOR |
| | Q351 | BF420L | TRANSISTOR |
| | Q352 | 2SC3902S | TRANSISTOR |
| | Q353 | 2SA1507S | TRANSISTOR |
| | Q371 | 2SC4002E-AA | TRANSISTOR |
| | Q549 | 2SK3178 | TRANSISTOR |
| | Q550 | 2SC5546002FD | TRANSISTOR |
| | Q560 | PDTC114EU | TRANSISTOR |
| | Q561 | BF420L | TRANSISTOR |
| | Q562 | PDTC114EU | TRANSISTOR |
| | Q563 | PDTC114EU | TRANSISTOR |
| | Q564 | PDTC114EU | TRANSISTOR |
| | Q566 | PDTC114EU | TRANSISTOR |
| | Q571 | 2SB1435R | TRANSISTOR |
| | Q601 | 2SK2645-01MR | TRANSISTOR |
| | Q603 | PDTC114EU | TRANSISTOR |
| | Q820 | KTN2907ASRTK | TRANSISTOR |
| | Q821 | 2SK3102F106 | TRANSISTOR |
| | Q827 | 2SA733Q | TRANSISTOR |
| | Q830 | 2SC3938R | TRANSISTOR |
| | Q853 | PDTC114EU | TRANSISTOR |
| | Q864 | KTN2907ASRTK | TRANSISTOR |
| | Q865 | 2SD1820AR | TRANSISTOR |
| | Q881 | 2SJ306MRB | TRANSISTOR |
| | Q890 | 2SK2158M | TRANSISTOR |
| | Q901 | 2SD1819AQ | TRANSISTOR |
| | Q910 | 2SC3187 | TRANSISTOR |
| | Q911 | 2SD602R | TRANSISTOR |
| | Q1051 | BF421L | TRANSISTOR |
| | Q1052 | BF420L | TRANSISTOR |
| | Q1151 | BF421L | TRANSISTOR |
| | Q1152 | BF420L | TRANSISTOR |
| | Q1251 | BF421L | TRANSISTOR |
| | Q1252 | BF420L | TRANSISTOR |
| | Q1380 | 2SA733Q | TRANSISTOR |
| | Q1381 | PDTC114EU | TRANSISTOR |
| | Q1382 | BF421L | TRANSISTOR |
| | Q1383 | 2SC3938R | TRANSISTOR |
| | Q1384 | 2SC3938R | TRANSISTOR |
| | Q1401 | PDTC114EU | TRANSISTOR |
| | Q1402 | PDTC114EU | TRANSISTOR |
| | | DIODES | |
| | D101 | MA4056NM | DIODE |
| | D102 | MA4056NM | DIODE |
| | D103 | MA4056NM | DIODE |
| | D107 | MA8051M | DIODE |
| | D111 | MA357 | DIODE |
| | D112 | MA4051NM | DIODE |
| | D128 | MA111 | DIODE |
| | D191 | SML78423C | DIODE(LED) |
| | D201 | MA4056NM | DIODE |
| | D202 | MA4056NM | DIODE |
| | D235 | MA8056M | DIODE |
| | D236 | MA8056M | DIODE |
| | D237 | MA8056M | DIODE |
| | D238 | MA8056M | DIODE |
| | D250 | MTZJ5R6B | ZENER DIODE |
| | D251 | MTZJ5R6B | ZENER DIODE |
| | D351 | MA111 | DIODE |
| | D352 | MA111 | DIODE |
| | D401 | ERA15O2 | DIODE |
| | D421 | MA4150NM | DIODE |
| | D440 | MA4051NM | DIODE |
| | D507 | MA4051NM | DIODE |
| | D550 | 5VUZ47 | DIODE |
| | D551 | ERC81-006 | DIODE |
| | D552 | MA113 | DIODE |
| | D553 | MA4150NM | DIODE |
| | D554 | MA4047NM | DIODE |

| | Ref.No. | Part No. | Description |
|---|---|---|---|
| | D573 | MA188 | DIODE |
| | D602 | 5JUZ47 | DIODE |
| | D603 | ERC3806 | DIODE |
| | D651 | MA167 | DIODE |
| | D652 | TVSAG01 | DIODE |
| | D653 | EG01Z | DIODE |
| | D654 | MA111 | DIODE |
| | D661 | ERA34-10 | DIODE |
| | D662 | MA167A | DIODE |
| | D663 | MA8110M | DIODE |
| | D821 | FBU4KF | DIODE |
| | D822 | ERA34-10 | DIODE |
| | D825 | MA113 | DIODE |
| | D826 | MA4300NM | DIODE |
| | D833 | MA4082NM | DIODE |
| | D841 | EG01Z | DIODE |
| | D842 | MA4150NL | DIODE |
| | D843 | ERA34-10 | DIODE |
| | D851 | ERC81-006 | DIODE |
| | D852 | MA111 | DIODE |
| | D855 | MA4091NM | DIODE |
| | D856 | CB903-4 | DIODE |
| | D861 | RG2A2 | DIODE |
| | D862 | FML-S16S | DIODE |
| | D863 | TVSRG2 | DIODE |
| | D864 | RL4Z | DIODE |
| | D865 | TVSD0003 | DIODE |
| | D866 | ERC30-02 | DIODE |
| | D867 | MA111 | DIODE |
| | D868 | RN3Z014-305 | DIODE |
| | D869 | MA4068NM | DIODE |
| | D870 | MA111 | DIODE |
| | D871 | MA4180NM | DIODE |
| | D872 | MA4022L | DIODE |
| | D873 | MA112 | DIODE |
| | D890 | MA167A | DIODE |
| | D897 | MA8150M | DIODE |
| | D901 | MA111 | DIODE |
| | D902 | TVSD0003 | DIODE |
| | D910 | MA174 | DIODE |
| | D911 | MA8150M | DIODE |
| | D912 | MA8150M | DIODE |
| | D950 | MA4110NH | DIODE |
| | D952 | MA4110NH | DIODE |
| | D1001 | MA111 | DIODE |
| | D1002 | MA111 | DIODE |
| | D1011 | MA111 | DIODE |
| | D1012 | MA111 | DIODE |
| | D1020 | MA167A | DIODE |
| | D1021 | MA167A | DIODE |
| | D1028 | MA167A | DIODE |
| | D1051 | MA167A | DIODE |
| | D1052 | MA167A | DIODE |
| | D1053 | MA167A | DIODE |
| | D1101 | MA111 | DIODE |
| | D1102 | MA111 | DIODE |
| | D1111 | MA111 | DIODE |
| | D1112 | MA111 | DIODE |
| | D1120 | MA167A | DIODE |
| | D1121 | MA167A | DIODE |
| | D1128 | MA167A | DIODE |
| | D1151 | MA167A | DIODE |

| | Ref.No. | Part No. | Description |
|---|---|---|---|
| | D1152 | MA167A | DIODE |
| | D1153 | MA167A | DIODE |
| | D1201 | MA111 | DIODE |
| | D1202 | MA111 | DIODE |
| | D1211 | MA111 | DIODE |
| | D1212 | MA111 | DIODE |
| | D1220 | MA167A | DIODE |
| | D1221 | MA167A | DIODE |
| | D1228 | MA167A | DIODE |
| | D1251 | MA167A | DIODE |
| | D1252 | MA167A | DIODE |
| | D1253 | MA167A | DIODE |
| | D1320 | MA729 | DIODE |
| | D1322 | MTZJ5R6B | ZENER DIODE |
| | D1323 | MTZJ5R6B | ZENER DIODE |
| | D1324 | MTZJ4R7B | ZENER DIODE |
| | D1325 | MA728 | DIODE |
| | D1331 | MA167A | DIODE |
| | D1340 | MTZJ8R2C | ZENRE DIODE |
| | D1341 | MTZJ4R7C | ZENER DIODE |
| | D1345 | MTZJ15C | ZENER DIODE |
| | D1356 | TVSD0003 | DIODE |
| | D1381 | MA111 | DIODE |
| | D1382 | EU02Z | DIODE |
| | D1383 | MA4091NM | DIODE |
| | D1384 | MA111 | DIODE |
| | D1505 | MA4130NM | DIODE |
| | | COIL & TRANSFORMERS | |
| | L111 | ELJFA8R2JB | CHIP COIL |
| | L124 | TLU4R7K186 | PEAKING COIL |
| | L550 | EXCELSR35S | LC COMBINATION |
| | L551 | EXCELSR35S | LC COMBINATION |
| ⚠ | L573 | TLHE026 | H. LINEARITY COIL |
| | L575 | TLUACNB471K | PEAKING COIL |
| | L601 | TLPF076 | CHOKE COIL |
| | L603 | TSK8029 | FERRITE CORE |
| ⚠ | L801 | TLPD037 | LINE FILTER |
| ⚠ | L802 | TLPD037 | LINE FILTER |
| | L803 | TSK8029 | FERRITE CORE |
| | L821 | TSK8042-1 | FERRITE CORE |
| ⚠ | L850 | TLPF091 | H. CHOPPER COIL |
| | L851 | EXCELSR35S | LC COMBINATION |
| | L860 | TSK8029 | FERRITE CORE |
| | L861 | TSK8029 | FERRITE CORE |
| | L862 | TSK8042-1 | FERRITE CORE |
| | L863 | TSK8029 | FERRITE CORE |
| | L864 | TSK8029 | FERRITE CORE |
| | L866 | TSK8029 | FERRITE CORE |
| | L868 | TSK8029 | FERRITE CORE |
| | L870 | TLU101K106 | PEAKING COIL |
| | L871 | TLU101K106 | PEAKING COIL |
| | L872 | EXCELSA35T | LC COMBINATION |
| | L873 | EXCELSA35T | LC COMBINATION |
| | L1051 | TLUABTAR22K | PEAKING COIL |
| | L1151 | TLUABTAR22K | PEAKING COIL |
| | L1251 | TLUABTAR22K | PEAKING COIL |
| | L1324 | TLU101K106 | PEAKING COIL |
| | L1340 | EXCELDR35C | LC COMBINATION |
| | L1352 | TSKA149 | FERRITE CORE |
| | L1355 | TSKA092 | FERRITE CORE |

| | Ref.No. | Part No. | Description | | | | Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L1371 | TSKA092 | FERRITE CORE | | | | C409 | ECQV1H224JL | P | 0.22UF | J | 50V |
| | L1401 | ELEXH151KA | PEAKING COIL | | | | C410 | ECA1HHG470 | E | 47UF | | 50V |
| ⚠ | T351 | TLHG010 | D.A.F. TRANSFORMER | | | | C411 | ECQV1224JM | P | 0.22UF | J | 100V |
| ⚠ | T541 | TLHA010 | H. DRIVE TRANSFORMER | | | | C412 | ECJ2YB1H473K | C | 0.047UF | K | 50V |
| ⚠ | T542 | TLHX008 | H. OUTPUT TRANSFORMER | | | | C413 | ECEA1EGE471 | E | 470UF | | 25V |
| ⚠ | T601 | ETF30L201AZ | FLYBACK TRANSFORMER (W/O ANODE&FOCUS LEAD) | | | | C420 | ECQB1H333JF | P | 0.033UF | J | 50V |
| ⚠ | T821 | TLPA075 | POWER TRANSFORMER | | | | C516 | ECEA2AGE010 | E | 1UF | | 100V |
| ⚠ | T823 | TLPA072 | POWER TRANSFORMER(SUB) | | | | C541 | ECJ3VB1H104K | C | 0.1UF | K | 50V |
| | | CONTROL | | | | | C549 | TACBN2A332KT | C | 3300PF | K | 100V |
| | | | | | | | C550 | ECEA1VGE470 | E | 47UF | | 35V |
| | VR580 | EVND1AA00B23 | CONTROL B | | 2K OHM | | C551 | ECA1HHG221 | E | 220UF | | 50V |
| | | CAPACITORS | | | | | C553 | ECWH20272HV | PP | 2700PF | H | 1.5KV |
| | | | | | | | C554 | ECWH20222HV | PP | 2200PF | H | 1.5KV |
| | | | | | | | C555 | ECQE2335KF | P | 3.3UF | K | 200V |
| | | | | | | | C556 | ECEA1VGE471 | E | 470UF | | 35V |
| | C101 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | | | | | | |
| | C102 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | C561 | ECWF2434HBB | PP | 0.43UF | H | 200V |
| | C103 | ECUX1H150JCN | C | 15PF | J | 50V | C563 | ECWF2224HBB | PP | 0.22UF | H | 200V |
| | C104 | ECUX1H150JCN | C | 15PF | J | 50V | C565 | ECWF2124HBB | PP | 0.12UF | H | 200V |
| | C105 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | C566 | ECWF2124HBB | PP | 0.12UF | H | 200V |
| | | | | | | | C567 | ECWF2105HBB | PP | 1UF | H | 200V |
| | C106 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | | | | | | |
| | C107 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | C568 | ECWF2124HBB | PP | 0.12UF | H | 200V |
| | C108 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | C571 | ECEA1CGE101 | E | 100UF | | 16V |
| | C109 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | C572 | ECA1HHG220 | E | 22UF | | 50V |
| | C110 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | C573 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V |
| | | | | | | | C580 | ECEA1CGE470 | E | 47UF | | 16V |
| | C111 | ECUX1H101JCG | C | 100PF | J | 50V | | | | | | |
| | C112 | ECUX1H121JCG | C | 120PF | J | 50V | C581 | ECA1EEN100 | E | 10UF | | 25V |
| | C113 | ECUX1H271JCG | C | 270PF | J | 50V | C582 | ECEA1AGE331 | E | 330UF | | 10V |
| | C114 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | C583 | ECA2AHG220 | E | 22UF | | 100V |
| | C115 | ECJ3YB1C105K | C | 1UF | K | 16V | C587 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V |
| | | | | | | | C590 | ECUX1H332KBN | C | 3300PF | K | 50V |
| | C116 | ECEA0JGE471 | E | 470UF | | 6.3V | | | | | | |
| | C117 | ECEA0JGE471 | E | 470UF | | 6.3V | C601 | ECQF6102JZ | PP | 1000PF | J | 600V |
| | C118 | ECEA1HGE100 | E | 10UF | | 50V | C602 | ECQF6332JZ | PP | 3300PF | J | 600V |
| | C120 | ECEA1HGE100 | E | 10UF | | 50V | C651 | ECEA2AGE100 | E | 10UF | | 100V |
| | C124 | ECA0JHG471 | E | 470UF | | 6.3V | C652 | ECEA2EGE100 | E | 10UF | | 250V |
| | | | | | | | C653 | ECEA2CGE100 | E | 10UF | | 160V |
| | C127 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | | | | | | |
| | C134 | ECUX1H101JCG | C | 100PF | J | 50V | C654 | ECEA2CGE3R3 | E | 3.3UF | | 160V |
| | C136 | ECUX1H101JCG | C | 100PF | J | 50V | C661 | ECKD2H103ZU | C | 0.01UF | Z | 500V |
| | C150 | ECUX1H103KBG | C | 0.01UF | K | 50V | C662 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V |
| | C151 | ECEA1HGE010 | E | 1UF | | 50V | C663 | ECQV1H824JL | P | 0.82UF | J | 50V |
| | | | | | | | C665 | ECUX1H471JCX | C | 470PF | J | 50V |
| | C152 | ECEA1HGE010 | E | 1UF | | 50V | | | | | | |
| | C153 | ECEA1HGE010 | E | 1UF | | 50V | C671 | ECQV1H224JL | P | 0.22UF | J | 50V |
| | C154 | ECEA1HGE010 | E | 1UF | | 50V | C706 | ECA1EEN100 | E | 10UF | | 25V |
| | C155 | ECEA1HGE010 | E | 1UF | | 50V | ⚠ C801 | ECQU2A334MGZ | PP | 0.33UF | M | 250V |
| | C156 | ECEA1HGE010 | E | 1UF | | 50V | ⚠ C802 | ECQU2A104MNF | PP | 0.1UF | M | 250V |
| | | | | | | | ⚠ C803 | ECKDRS222MEY | C | 2200PF | M | |
| | C157 | ECEA1HGE010 | E | 1UF | | 50V | | | | | | |
| | C161 | ECUX1H562JCW | C | 5600PF | J | 50V | ⚠ C804 | ECKDRS222MEY | C | 2200PF | M | |
| | C162 | ECUX1H562JCW | C | 5600PF | J | 50V | ⚠ C805 | ECKDRS222MEY | C | 2200PF | M | |
| | C163 | ECUX1H562JCW | C | 5600PF | J | 50V | C821 | TAC1094Z331A | E | 330UF | | 400V |
| | C164 | ECUX1H562JCW | C | 5600PF | J | 50V | C822 | ECQE4473KF | P | 0.047UF | K | 400V |
| | | | | | | | C823 | ECKD3D471KBP | C | 470PF | K | 2KV |
| | C165 | ECUX1H223KBX | C | 0.022UF | K | 50V | | | | | | |
| | C166 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | C824 | ECEA2AGE010 | E | 1UF | | 100V |
| | C167 | ECUX1H103KBG | C | 0.01UF | K | 50V | C825 | ECEA1VGE330 | E | 33UF | | 35V |
| | C181 | ECEA1CGE470 | E | 47UF | | 16V | C828 | ECUX1H222KBN | C | 2200PF | K | 50V |
| | C230 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V | ⚠ C831 | ECKDRS472MEY | C | 4700PF | M | |
| | | | | | | | ⚠ C832 | ECKDRS472MEY | C | 4700PF | M | |
| | C246 | ECJ2VB1C154K | C | 0.15UF | K | 16V | | | | | | |
| | C307 | ECA1HEN2R2 | E | 2.2UF | | 50V | C833 | ECJ2VF1H104Z | C | 0.1UF | Z | 50V |
| | C316 | ECEA1HGE4R7 | E | 4.7UF | | 50V | C834 | ECUX1H222KBN | C | 2200PF | K | 50V |
| | C352 | ECEA2AGE220 | E | 22UF | | 100V | C835 | ECQB1H222JF | P | 2200PF | J | 50V |
| | C353 | ECQV1474JM | P | 0.47UF | J | 100V | C836 | ECUX1H471KBN | C | 470PF | K | 50V |
| | | | | | | | C837 | ECEA1HGE2R2 | E | 2.2UF | | 50V |
| | C371 | ECKD2H471KB5 | C | 470PF | K | 500V | | | | | | |
| | C407 | ECA1VHG101 | E | 100UF | | 35V | C839 | ECUX1H222KBN | C | 2200PF | K | 50V |
| | C408 | ECA1EHG102 | E | 1000UF | | 25V | C840 | ECKD2H102KB5 | C | 1000PF | K | 500V |

| Ref.No. | Part No. | Description | | | Ref.No. | Part No. | Description | | |
|---|---|---|---|---|---|---|---|---|---|
| C841 | ECEA1EGE101 | E 100UF | | 25V | C1122 | TACCL1C107MT | E 100UF | | 16V |
| C842 | ECJ3VB1H104K | C 0.1UF | K | 50V | C1125 | ECEA1HGE010 | E 1UF | | 50V |
| C843 | ECEA1CGE470 | E 47UF | | 16V | C1130 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C845 | ECEA1EGE101 | E 100UF | | 25V | C1151 | ECQE1474KF | P 0.47UF | K | 100V |
| C848 | ECQE4104JF | P 0.1UF | J | 400V | C1152 | ECKD2H332KB5 | C 3300PF | K | 500V |
| C850 | ECKD2H102KB5 | C 1000PF | K | 500V | C1153 | TACBN2A103KT | C 0.01UF | K | 100V |
| C851 | EEUFC1A102 | E 1000UF | | 10V | C1155 | TACBU2E683KT | C 0.068UF | K | 250V |
| C853 | ECJ2VB1C104K | C 0.1UF | K | 16V | C1202 | ECJ2VF1C105Z | C 1UF | Z | 16V |
| C855 | ECKD3D471KBP | C 470PF | K | 2KV | C1212 | ECJ2VF1C105Z | C 1UF | Z | 16V |
| C856 | ECEA1AGE471 | E 470UF | | 10V | C1220 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C857 | ECEA1CGE470 | E 47UF | | 16V | C1222 | TACCL1C107MT | E 100UF | | 16V |
| C858 | ECJ2VB1C104K | C 0.1UF | K | 16V | C1225 | ECEA1HGE010 | E 1UF | | 50V |
| C859 | ECQE2224KF | P 0.22UF | K | 200V | C1230 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C861 | ECEA2CGE221W | E 220UF | | 160V | C1251 | ECQE1474KF | P 0.47UF | K | 100V |
| C862 | TACCB2A331MA | E 330UF | | 100V | C1252 | ECKD2H332KB5 | C 3300PF | K | 500V |
| C863 | ECEA1VGE471 | E 470UF | | 35V | C1253 | TACBN2A103KT | C 0.01UF | K | 100V |
| C864 | ECEA1EGE222 | E 2200UF | | 25V | C1255 | TACBU2E683KT | C 0.068UF | K | 250V |
| C865 | ECEA1EGE102 | E 1000UF | | 25V | C1301 | TACCL0J227MT | E 220UF | | 6.3V |
| C866 | ECEA1CGE102 | E 1000UF | | 16V | C1302 | TACCL1C107MT | E 100UF | | 16V |
| C867 | ECKD2H102KB5 | C 1000PF | K | 500V | C1305 | TACCL0J227MT | E 220UF | | 6.3V |
| C868 | ECEA1EGE102 | E 1000UF | | 25V | C1306 | ECJ2VF1C105Z | C 1UF | Z | 16V |
| C869 | ECEA1CGE331 | E 330UF | | 16V | C1308 | TACCL1C107MT | E 100UF | | 16V |
| C870 | ECEA0JGE331 | E 330UF | | 6.3V | C1315 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C873 | TACDR2A227MA | E 220UF | | 100V | C1317 | ECEA1CGE101 | E 100UF | | 16V |
| C874 | ECEA1CGE101 | E 100UF | | 16V | C1320 | ECEA1CGE101 | E 100UF | | 16V |
| C875 | ECQE2224KF | P 0.22UF | K | 200V | C1321 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C876 | ECKD2H102KB5 | C 1000PF | K | 500V | C1322 | ECA0JHG102 | E 1000UF | | 6.3V |
| C877 | ECEA1EGE220 | E 22UF | | 25V | C1323 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C878 | ECUX1C334KBW | C 0.33UF | K | 16V | C1324 | ECUX1H681JCX | C 680PF | J | 50V |
| C879 | ECEA1CGE471 | E 470UF | | 16V | C1325 | ECJ2VF1C105Z | C 1UF | Z | 16V |
| C880 | ECEA1EGE220 | E 22UF | | 25V | C1327 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C881 | ECEA1HGE470 | E 47UF | | 50V | C1328 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C885 | ECKD2H122KB5 | C 1200PF | K | 500V | C1329 | ECUX1H101JCG | C 100PF | J | 50V |
| C886 | ECUX1H222KBN | C 2200PF | K | 50V | C1332 | ECJ2VF1E224Z | C 0.22UF | Z | 25V |
| C887 | ECUX1H681KBN | C 680PF | K | 50V | C1333 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C888 | TACBU2E333KT | C 0.033UF | K | 250V | C1339 | ECJ2VF1C105Z | C 1UF | Z | 16V |
| C889 | ECQE2684KF | P 0.68UF | K | 200V | C1340 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C893 | ECUX1H102KBN | C 1000PF | K | 50V | C1341 | ECEA1EGE100 | E 10UF | | 25V |
| C897 | ECUX1H472JCW | C 4700PF | J | 50V | C1343 | TACBN2A103KT | C 0.01UF | K | 100V |
| C910 | ECJ2YB1H104K | C 0.1UF | K | 50V | C1344 | ECEA2AGE220 | E 22UF | | 100V |
| C911 | ECUX1H103KBG | C 0.01UF | K | 50V | C1346 | ECEA2AGE2R2 | E 2.2UF | | 100V |
| C913 | ECUX1H472KBG | C 4700PF | K | 50V | C1347 | TACBN2A222KT | C 2200PF | K | 100V |
| C914 | ECUX1H102KBN | C 1000PF | K | 50V | C1348 | ECEA2AGE220 | E 22UF | | 100V |
| C916 | TACCJ103P200 | C 0.01UF | | 200V | C1351 | TACDH2E102KT | C 1000PF | K | 250V |
| C917 | TACCJ103P200 | C 0.01UF | | 200V | C1355 | TACCJ102P500 | C 1000PF | | 500V |
| C950 | ECJ2VF1H104Z | C 0.1UF | Z | 50V | C1365 | ECCD2H100D | C 10PF | D | 500V |
| C951 | ECEA1HGE4R7 | E 4.7UF | | 50V | C1370 | ECKD2H102KB5 | C 1000PF | K | 500V |
| C952 | ECEA1HGE4R7 | E 4.7UF | | 50V | C1372 | TACBU06103KT | C 0.01UF | K | 630V |
| C1002 | ECJ2VF1C105Z | C 1UF | Z | 16V | C1373 | TACBU06103KT | C 0.01UF | K | 630V |
| C1012 | ECJ2VF1C105Z | C 1UF | Z | 16V | C1374 | TACBU06103KT | C 0.01UF | K | 630V |
| C1015 | ECJ2VF1C105Z | C 1UF | Z | 16V | C1381 | ECJ2VF1H104Z | C 0.1UF | Z | 50V |
| C1020 | ECUX1H103KBG | C 0.01UF | K | 50V | C1382 | ECUX1H223KBX | C 0.022UF | K | 50V |
| C1022 | TACCL1C107MT | E 100UF | | 16V | C1391 | ECQE2563JF | P 0.056UF | J | 200V |
| C1025 | ECEA1HGE010 | E 1UF | | 50V | C1402 | ECJ2VF1H104Z | C 0.1UF | Z | 50V |
| C1030 | ECUX1H103KBG | C 0.01UF | K | 50V | C1403 | ECJ2VF1H683Z | C 0.068UF | Z | 50V |
| C1051 | ECQE1474KF | P 0.47UF | K | 100V | C1405 | ECJ2VF1H104Z | C 0.1UF | Z | 50V |
| C1052 | ECKD2H332KB5 | C 3300PF | K | 500V | C1406 | ECEA0JGE101 | E 100UF | | 6.3V |
| C1053 | TACBN2A103KT | C 0.01UF | K | 100V | C1408 | ECUX1H220JCN | C 22PF | J | 50V |
| C1055 | TACBU2E683KT | C 0.068UF | K | 250V | C1409 | ECJ2VF1C105Z | C 1UF | Z | 16V |
| C1102 | ECJ2VF1C105Z | C 1UF | Z | 16V | C1410 | ECEA1EGE100 | E 10UF | | 25V |
| C1112 | ECJ2VF1C105Z | C 1UF | Z | 16V | C1501 | ECUX1H103KBG | C 0.01UF | K | 50V |
| C1115 | ECJ2VF1C105Z | C 1UF | Z | 16V | | | | | |

| Ref.No. | Part No. | Description | | | | | Ref.No. | Part No. | Description | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | RESISTORS | | | | | | J1404 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| | | | | | | | J1405 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| | | | | | | | J1407 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| C204 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1451 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| D1501 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1452 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| D1503 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | | | | | | | |
| J601 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1453 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| J603 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1454 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| | | | | | | | J1459 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| J604 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1461 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| J605 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1462 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| J607 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | | | | | | | |
| J608 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1501 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J610 | ERJ6GEYJ103 | M | 10K | OHM | J | 1/10W | J1503 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| | | | | | | | J1504 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J611 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1505 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J612 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1506 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J614 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | | | | | | | |
| J615 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1507 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J616 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1508 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| | | | | | | | J1509 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J617 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1510 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J618 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | J1511 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J701 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | | | | | | | |
| J702 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | J1512 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J704 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | J1513 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| | | | | | | | J1514 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J705 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | J1515 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J708 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | J1551 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J709 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | | | | | | | |
| J711 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | J1552 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| J713 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | J1554 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W |
| | | | | | | | L1321 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| J714 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | L1322 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| J715 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | L1323 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| J718 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | | | | | | | |
| J719 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | L1341 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| J721 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R101 | ERJ6GEYJ222 | M | 2.2K | OHM | J | 1/10W |
| | | | | | | | R102 | ERJ6GEYJ222 | M | 2.2K | OHM | J | 1/10W |
| J722 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R103 | ERJ6GEYJ271 | M | 270 | OHM | J | 1/10W |
| J724 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R104 | ERJ6GEYJ271 | M | 270 | OHM | J | 1/10W |
| J725 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | | | | | | | |
| J726 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R105 | ERJ8GCYJ101 | M | 100 | OHM | J | 1/8W |
| J727 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R106 | ERJ8GCYJ101 | M | 100 | OHM | J | 1/8W |
| | | | | | | | R107 | ERJ8GCYJ101 | M | 100 | OHM | J | 1/8W |
| J728 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R108 | ERJ6GEYJ330 | M | 33 | OHM | J | 1/10W |
| J729 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R109 | ERJ6GEYJ330 | M | 33 | OHM | J | 1/10W |
| J731 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | | | | | | | |
| J732 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R110 | ERJ6GEYJ152 | M | 1.5K | OHM | J | 1/10W |
| J733 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R111 | ERJ6GEYJ122 | M | 1.2K | OHM | J | 1/10W |
| | | | | | | | R112 | ERJ6GEYJ224 | M | 220K | OHM | J | 1/10W |
| J734 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R113 | ERJ6GEYJ272 | M | 2.7K | OHM | J | 1/10W |
| J735 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R114 | ERJ6GEYJ222 | M | 2.2K | OHM | J | 1/10W |
| J736 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | | | | | | | |
| J737 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R115 | ERJ6GEYJ683 | M | 68K | OHM | J | 1/10W |
| J738 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R116 | ERJ6GEYJ392 | M | 3.9K | OHM | J | 1/10W |
| | | | | | | | R117 | ERJ6GEYJ561 | M | 560 | OHM | J | 1/10W |
| J739 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R118 | ERDS1FJ681 | C | 680 | OHM | J | 1/2W |
| J740 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R119 | ERJ8GCYJ222 | M | 2.2K | OHM | J | 1/8W |
| J742 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | | | | | | | |
| J743 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R120 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W |
| J744 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R121 | ERJ6GEYJ472 | M | 4.7K | OHM | J | 1/10W |
| | | | | | | | R123 | ERJ6GEYJ101 | M | 100 | OHM | J | 1/10W |
| J746 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R124 | ERJ6GEYJ472 | M | 4.7K | OHM | J | 1/10W |
| J747 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R125 | ERJ6GEYJ472 | M | 4.7K | OHM | J | 1/10W |
| J748 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | | | | | | | |
| J750 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R126 | ERJ6GEYJ101 | M | 100 | OHM | J | 1/10W |
| J752 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R127 | ERJ6GEYJ472 | M | 4.7K | OHM | J | 1/10W |
| | | | | | | | R128 | ERJ6GEYJ104 | M | 100K | OHM | J | 1/10W |
| J872 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R129 | ERJ8GCYJ222 | M | 2.2K | OHM | J | 1/8W |
| J873 | ERJ8GCYOR00 | M | 0 | OHM | | 1/8W | R130 | ERD25TJ565 | C | 5.6M | OHM | J | 1/4W |
| J1401 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | | | | | | | |
| J1402 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | R131 | ERDS2TJ270 | C | 27 | OHM | J | 1/4W |
| J1403 | ERJ6GEYOR00 | M | 0 | OHM | | 1/10W | R132 | ERDS2TJ270 | C | 27 | OHM | J | 1/4W |

| Ref.No. | Part No. | Description | | | | |
|---|---|---|---|---|---|---|
| R133 | ERJ6GEYJ271 | M | 270 | OHM | J | 1/10W |
| R134 | ERJ6GEYJ222 | M | 2.2K | OHM | J | 1/10W |
| R135 | ERJ6GEYJ271 | M | 270 | OHM | J | 1/10W |
| R136 | ERJ6GEYJ222 | M | 2.2K | OHM | J | 1/10W |
| R137 | ERJ8GCYJ103 | M | 10K | OHM | J | 1/8W |
| R138 | ERJ6GEYJ332 | M | 3.3K | OHM | J | 1/10W |
| R139 | ERJ6GEYJ332 | M | 3.3K | OHM | J | 1/10W |
| R147 | ERJ6GEY0R00 | M | 0 | OHM | | 1/10W |
| R150 | ERJ6ENF5361 | M | 5.36K | OHM | F | 1/10W |
| R151 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R152 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R153 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R154 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R155 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R156 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R157 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R158 | ERJ6GEY0R00 | M | 0 | OHM | | 1/10W |
| R161 | ERJ6GEYJ272 | M | 2.7K | OHM | J | 1/10W |
| R162 | ERJ6GEYJ333 | M | 33K | OHM | J | 1/10W |
| R163 | ERJ6ENF1003 | M | 100K | OHM | F | 1/10W |
| R164 | ERJ6ENF1003 | M | 100K | OHM | F | 1/10W |
| R167 | ERJ6GEYJ561 | M | 560 | OHM | J | 1/10W |
| R171 | ERJ6GEYJ563 | M | 56K | OHM | J | 1/10W |
| R172 | ERJ6GEYJ123 | M | 12K | OHM | J | 1/10W |
| R173 | ERJ6GEYJ103 | M | 10K | OHM | J | 1/10W |
| R175 | ERJ6GEYJ563 | M | 56K | OHM | J | 1/10W |
| R176 | ERJ6GEYJ123 | M | 12K | OHM | J | 1/10W |
| R177 | ERJ6GEYJ103 | M | 10K | OHM | J | 1/10W |
| R181 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R182 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R183 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R184 | ERDS1FJ471 | C | 470 | OHM | J | 1/2W |
| R186 | ERJ6GEYJ472 | M | 4.7K | OHM | J | 1/10W |
| R187 | ERJ6GEYJ472 | M | 4.7K | OHM | J | 1/10W |
| R191 | ERJ6GEYJ181 | M | 180 | OHM | J | 1/10W |
| R192 | ERD25FJ221K | C | 220 | OHM | J | 1/4W |
| R201 | ERJ6GEYJ101 | M | 100 | OHM | J | 1/10W |
| R202 | ERJ6GEYJ122 | M | 1.2K | OHM | J | 1/10W |
| R203 | ERJ6GEYJ471 | M | 470 | OHM | J | 1/10W |
| R204 | ERJ6GEYJ103 | M | 10K | OHM | J | 1/10W |
| R205 | ERJ6GEYJ223 | M | 22K | OHM | J | 1/10W |
| R206 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R231 | ERJ6GEYJ471 | M | 470 | OHM | J | 1/10W |
| R232 | ERJ6GEYJ471 | M | 470 | OHM | J | 1/10W |
| R233 | ERJ6GEYJ471 | M | 470 | OHM | J | 1/10W |
| R234 | ERJ6GEYJ221 | M | 220 | OHM | J | 1/10W |
| R235 | ERJ6GEYJ223 | M | 22K | OHM | J | 1/10W |
| R236 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R237 | ERJ6GEYJ221 | M | 220 | OHM | J | 1/10W |
| R240 | ERJ8GCYJ101 | M | 100 | OHM | J | 1/8W |
| R241 | ERJ8GCYJ101 | M | 100 | OHM | J | 1/8W |
| R246 | ERJ6ENF2000 | M | 200 | OHM | F | 1/10W |
| R254 | ERJ6GEY0R00 | M | 0 | OHM | | 1/10W |
| R255 | ERJ6GEY0R00 | M | 0 | OHM | | 1/10W |
| R256 | ERJ6GEYJ331 | M | 330 | OHM | J | 1/10W |
| R305 | ERJ6ENF2001 | M | 2K | OHM | F | 1/10W |
| R307 | ERJ6ENF2871 | M | 2.87K | OHM | F | 1/10W |
| R314 | ERJ6ENF1402 | M | 14K | OHM | F | 1/10W |
| R350 | ERG2SJ101 | M | 100 | OHM | J | 2W |
| R351 | ERG2SJ103 | M | 10K | OHM | J | 2W |
| R352 | ER0S2CKF2490 | M | 249 | OHM | F | 1/4W |
| R353 | ERDS2TJ100 | C | 10 | OHM | J | 1/4W |

| Ref.No. | Part No. | Description | | | | |
|---|---|---|---|---|---|---|
| R356 | ERDS2TJ104 | C | 100K | OHM | J | 1/4W |
| R358 | ERJ6GEYJ102 | M | 1K | OHM | J | 1/10W |
| R359 | ERG2SJ680 | M | 68 | OHM | J | 2W |
| R371 | ERDS1FJ394 | C | 390K | OHM | J | 1/2W |
| R372 | ERDS1TJ225 | C | 2.2M | OHM | J | 1/2W |
| R373 | ERJ6GEYJ473 | M | 47K | OHM | J | 1/10W |
| R374 | ERJ6ENF6801 | M | 6.8K | OHM | F | 1/10W |
| R406 | ER0S2CKF1212 | M | 12.1K | OHM | F | 1/4W |
| R414 | ER0S2CKF1201 | M | 1.2K | OHM | F | 1/4W |
| R415 | ER0S2CKF1102 | M | 11K | OHM | F | 1/4W |
| R418 | ER0S2CKF1132 | M | 11.3K | OHM | F | 1/4W |
| R421 | ER0S2CKF1201 | M | 1.2K | OHM | F | 1/4W |
| R423 | ERX2SG1R0 | M | 1 | OHM | G | 2W |
| R426 | ERJ6ENF3921 | M | 3.92K | OHM | F | 1/10W |
| R427 | ERDS2TJ1R0 | C | 1 | OHM | J | 1/4W |
| R429 | ERX1SJR68 | M | 0.68 | OHM | J | 1W |
| R440 | ERJ6GEYJ272 | M | 2.7K | OHM | J | 1/10W |
| R527 | ERJ6GEYJ221 | M | 220 | OHM | J | 1/10W |
| R542 | ERJ6ENF4871 | M | 4.87K | OHM | F | 1/10W |
| R543 | ERJ6ENF8661 | M | 8.66K | OHM | F | 1/10W |
| R544 | ERJ6ENF1822 | M | 18.2K | OHM | F | 1/10W |
| R545 | ERG3FJ470 | M | 47 | OHM | J | 3W |
| R546 | ERG3FJ470 | M | 47 | OHM | J | 3W |
| R547 | ERDS2TJ470 | C | 47 | OHM | J | 1/4W |
| R548 | ERJ6GEYJ332 | M | 3.3K | OHM | J | 1/10W |
| R549 | ERG1SJ182 | M | 1.8K | OHM | J | 1W |
| R550 | ERJ8GCYJ562 | M | 5.6K | OHM | J | 1/8W |
| R551 | ERX2FJ1R8 | M | 1.8 | OHM | J | 2W |
| R552 | ERX2FJ1R8 | M | 1.8 | OHM | J | 2W |
| R554 | ERG3FJ120 | M | 12 | OHM | J | 3W |
| R556 | ERDS2TJ100 | C | 10 | OHM | J | 1/4W |
| R557 | ERJ8GCYJ104 | M | 100K | OHM | J | 1/8W |
| R558 | ERJ6GEYJ472 | M | 4.7K | OHM | J | 1/10W |
| R559 | ERJ8GCYJ104 | M | 100K | OHM | J | 1/8W |
| R560 | ERJ8GCYJ472 | M | 4.7K | OHM | J | 1/8W |
| R561 | ERJ6GEYJ100 | M | 10 | OHM | J | 1/10W |
| R562 | ERJ6GEYJ104 | M | 100K | OHM | J | 1/10W |
| R563 | ERJ8GCYJ472 | M | 4.7K | OHM | J | 1/8W |
| R564 | ERJ6GEYJ100 | M | 10 | OHM | J | 1/10W |
| R565 | ERJ8GCYJ104 | M | 100K | OHM | J | 1/8W |
| R566 | ERJ6GEYJ472 | M | 4.7K | OHM | J | 1/10W |
| R567 | ERJ6GEYJ100 | M | 10 | OHM | J | 1/10W |
| R568 | ERJ8GCYJ104 | M | 100K | OHM | J | 1/8W |
| R569 | ERDS2TJ100 | C | 10 | OHM | J | 1/4W |
| R570 | ERJ6ENF1002 | M | 10K | OHM | F | 1/10W |
| R571 | ERJ6ENF1182 | M | 11.8K | OHM | F | 1/10W |
| R572 | ERG2SJ150 | M | 15 | OHM | J | 2W |
| R573 | ERQ12AJ271 | F | 270 | OHM | J | 1/2W |
| R574 | ERDS2TJ472 | C | 4.7K | OHM | J | 1/4W |
| R575 | ERJ6GEYJ153 | M | 15K | OHM | J | 1/10W |
| R576 | ERJ6ENF4701 | M | 4.7K | OHM | F | 1/10W |
| R577 | ER0S2CKF7502 | M | 75K | OHM | F | 1/4W |
| R578 | ER0S2CKF7502 | M | 75K | OHM | F | 1/4W |
| R579 | ERJ6ENF4421 | M | 4.42K | OHM | F | 1/10W |
| R580 | ERDS1FJ683 | C | 68K | OHM | J | 1/2W |
| R581 | ERQ12AJ4R7 | F | 4.7 | OHM | J | 1/2W |
| R582 | ERJ6GEYJ223 | M | 22K | OHM | J | 1/10W |
| R583 | ERDS2TJ101 | C | 100 | OHM | J | 1/4W |
| R584 | ERDS2TJ101 | C | 100 | OHM | J | 1/4W |
| R585 | ERX2SJ6R8 | M | 6.8 | OHM | J | 2W |
| R586 | ERG2SJ150 | M | 15 | OHM | J | 2W |
| R588 | ERDS2TJ223 | C | 22K | OHM | J | 1/4W |

| Ref.No. | Part No. | Description | | | | Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R590 | ERDS1FJ2R2 | C | 2.2 | OHM | J 1/2W | R850 | ERJ6GEYJ122 | M | 1.2K | OHM | J 1/10W |
| R591 | ERJ6GEYJ472 | M | 4.7K | OHM | J 1/10W | R851 | ERJ6GEYJ472 | M | 4.7K | OHM | J 1/10W |
| R592 | ERX1SJ2R7 | M | 2.7 | OHM | J 1W | R853 | ERDS1FJ151 | C | 150 | OHM | J 1/2W |
| R601 | ERJ6GEYJ391 | M | 390 | OHM | J 1/10W | R854 | ERJ6GEYJ820 | M | 82 | OHM | J 1/10W |
| R602 | ERX1SZJR15 | M | 0.15 | OHM | J 1W | R856 | ERA6YEB104 | M | 100K | OHM | B 1/10W |
| R604 | ERG3FJ680 | M | 68 | OHM | J 3W | R857 | ERA6YEB302 | M | 3K | OHM | B 1/10W |
| R605 | ERG3FJ680 | M | 68 | OHM | J 3W | R858 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R606 | ERDS2TJ102 | C | 1K | OHM | J 1/4W | R859 | ERDS2TJ391 | C | 390 | OHM | J 1/4W |
| R651 | ERQ14AJ010HK | F | 1 | OHM | J 1/4W | R860 | ERG2SJ270 | M | 27 | OHM | J 2W |
| R652 | ERQ14AJR47HK | F | 0.47 | OHM | J 1/4W | R861 | ERQ12AJR33HK | F | 0.33 | OHM | J 1/2W |
| R653 | ERQ14AJR47HK | F | 0.47 | OHM | J 1/4W | R862 | ERQ12AJR12HK | F | 0.12 | OHM | J 1/2W |
| R654 | ERDS1FJ124 | C | 120K | OHM | J 1/2W | R863 | ERQ12AJR47 | F | 0.47 | OHM | J 1/2W |
| R655 | ERJ8ENF4421 | M | 4.42K | OHM | F 1/8W | R864 | ERQ12AJR12HK | F | 0.12 | OHM | J 1/2W |
| R656 | EROS2CKF2702 | M | 27K | OHM | F 1/4W | R865 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W |
| R657 | ERJ6ENF3162 | M | 31.6K | OHM | F 1/10W | R866 | ERQ12AJR33HK | F | 0.33 | OHM | J 1/2W |
| R658 | ERJ6ENF1401 | M | 1.4K | OHM | F 1/10W | R867 | ERJ6GEYJ104 | M | 100K | OHM | J 1/10W |
| R659 | ERJ6ENF5361 | M | 5.36K | OHM | F 1/10W | R868 | ERQ12AJR12HK | F | 0.12 | OHM | J 1/2W |
| R661 | ERQ14AJ101 | F | 100 | OHM | J 1/4W | R869 | ERDS2TJ471 | C | 470 | OHM | J 1/4W |
| R662 | ERJ6GEYJ332 | M | 3.3K | OHM | J 1/10W | R870 | ERDS1FJ224 | C | 220K | OHM | J 1/2W |
| R663 | ERJ8ENF4421 | M | 4.42K | OHM | F 1/8W | R871 | ERJ6GEYJ273 | M | 27K | OHM | J 1/10W |
| R664 | ERDS2TJ333 | C | 33K | OHM | J 1/4W | R874 | ERDS2TJ682 | C | 6.8K | OHM | J 1/4W |
| R665 | ERJ6ENF1002 | M | 10K | OHM | F 1/10W | R876 | ERJ6GEYJ562 | M | 5.6K | OHM | J 1/10W |
| R666 | ERJ6GEYJ474 | M | 470K | OHM | J 1/10W | R877 | ERJ6GEYJ683 | M | 68K | OHM | J 1/10W |
| R667 | ERJ6ENF1503 | M | 150K | OHM | F 1/10W | R878 | EROS1CKF3402 | M | 34K | OHM | F 1/2W |
| R668 | ERJ6ENF1003 | M | 100K | OHM | F 1/10W | R879 | EROS1CKF3402 | M | 34K | OHM | F 1/2W |
| R669 | ERJ6ENF1741 | M | 1.74K | OHM | F 1/10W | R880 | EROS2CKF1211 | M | 1.21K | OHM | F 1/4W |
| R671 | EROS2CKF8202 | M | 82K | OHM | F 1/4W | R881 | ERJ6ENF1821 | M | 1.82K | OHM | F 1/10W |
| R672 | EROS2CKF8202 | M | 82K | OHM | F 1/4W | R883 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R673 | ERJ6GEY0R00 | M | 0 | OHM | 1/10W | R885 | ERJ6GEYJ223 | M | 22K | OHM | J 1/10W |
| R678 | ERJ8GCYJ102 | M | 1K | OHM | J 1/8W | R886 | ERJ6GEYJ332 | M | 3.3K | OHM | J 1/10W |
| R720 | ERJ6GEYJ472 | M | 4.7K | OHM | J 1/10W | R888 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R721 | ERJ6GEYJ104 | M | 100K | OHM | J 1/10W | R889 | ERJ8GCYJ151 | M | 150 | OHM | J 1/8W |
| R722 | ERJ6GEYJ182 | M | 1.8K | OHM | J 1/10W | R890 | ERX2SJ1R0 | M | 1 | OHM | J 2W |
| R801 | ERC12AGK105 | S | 1M | OHM | K 1/2W | R891 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R820 | ERJ6GEYJ563 | M | 56K | OHM | J 1/10W | R892 | ERJ6ENF2210 | M | 221 | OHM | F 1/10W |
| R821 | ERF2EKR22 | W | 0.22 | OHM | K 2W | R893 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R822 | ERG3FJ104 | M | 100K | OHM | J 3W | R895 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W |
| R823 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W | R896 | ERDS2TJ332 | C | 3.3K | OHM | J 1/4W |
| R824 | ERJ6ENF1211 | M | 1.21K | OHM | F 1/10W | R897 | ERJ6GEYJ225 | M | 2.2M | OHM | J 1/10W |
| R825 | ERJ6GEYJ682 | M | 6.8K | OHM | J 1/10W | R898 | ERJ6ENF2001 | M | 2K | OHM | F 1/10W |
| R826 | ERJ6ENF7152 | M | 71.5K | OHM | F 1/10W | R899 | ERDS1FJ224 | C | 220K | OHM | J 1/2W |
| R827 | ERDS1FJ394 | C | 390K | OHM | J 1/2W | R902 | ERDS2TJ103 | C | 10K | OHM | J 1/4W |
| R828 | ERDS1FJ394 | C | 390K | OHM | J 1/2W | R903 | ERDS1FJ102 | C | 1K | OHM | J 1/2W |
| R829 | ERJ8GCYJ223 | M | 22K | OHM | J 1/8W | R910 | ERDS1FJ392 | C | 3.9K | OHM | J 1/2W |
| R830 | ERJ6GEYJ273 | M | 27K | OHM | J 1/10W | R911 | ERDS1FJ392 | C | 3.9K | OHM | J 1/2W |
| R831 | ERD25FJ560K | C | 56 | OHM | J 1/4W | R912 | ERJ6GEYJ474 | M | 470K | OHM | J 1/10W |
| R832 | ERJ6GEYJ220 | M | 22 | OHM | J 1/10W | R913 | ERJ6GEYJ474 | M | 470K | OHM | J 1/10W |
| R833 | ERD25FJ223K | C | 22K | OHM | J 1/4W | R914 | ERJ6ENF1050 | M | 105 | OHM | F 1/10W |
| R834 | ERJ8GCYJ222 | M | 2.2K | OHM | J 1/8W | R915 | ERDS1FJ273 | C | 27K | OHM | J 1/2W |
| R835 | ERJ8GCYJ222 | M | 2.2K | OHM | J 1/8W | R916 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W |
| R836 | ERX1SJR22 | M | 0.22 | OHM | J 1W | R917 | ERJ6GEYJ332 | M | 3.3K | OHM | J 1/10W |
| R837 | ERJ6ENF2200 | M | 220 | OHM | F 1/10W | R918 | ERJ6GEYJ105 | M | 1M | OHM | J 1/10W |
| R838 | ERJ6GEYJ222 | M | 2.2K | OHM | J 1/10W | R919 | ERJ6GEYJ104 | M | 100K | OHM | J 1/10W |
| R839 | ERJ6GEYJ332 | M | 3.3K | OHM | J 1/10W | R920 | ERJ6ENF9091 | M | 9.09K | OHM | F 1/10W |
| R840 | ERJ6GEYJ682 | M | 6.8K | OHM | J 1/10W | R951 | ERDS2TJ102 | C | 1K | OHM | J 1/4W |
| R841 | ERDS1FJ104 | C | 100K | OHM | J 1/2W | R952 | ERJ8GCYK2R7 | M | 2.7 | OHM | K 1/8W |
| R842 | ERJ6GEYJ220 | M | 22 | OHM | J 1/10W | R953 | ERQ14AJ100 | F | 10 | OHM | J 1/4W |
| R844 | ERJ6GEYJ154 | M | 150K | OHM | J 1/10W | R1001 | TAJADQ75ROFV | M | 75 | OHM | F 1/3W |
| R845 | ERD25FJ100K | C | 10 | OHM | J 1/4W | R1003 | ERJ6GEYJ330 | M | 33 | OHM | J 1/10W |
| R846 | ERDS2TJ272 | C | 2.7K | OHM | J 1/4W | R1011 | TAJADQ75ROFV | M | 75 | OHM | F 1/3W |
| R847 | ERJ6GEYJ104 | M | 100K | OHM | J 1/10W | R1013 | ERJ6GEYJ330 | M | 33 | OHM | J 1/10W |
| R848 | ERJ6GEY0R00 | M | 0 | OHM | 1/10W | R1021 | ERJ8GCY0R00 | M | 0 | OHM | 1/8W |

| Ref.No. | Part No. | Description | | | | Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R1025 | ERJ8ENF75RO | M | 75 | OHM | F 1/8W | R1332 | ERJ6GEY0R00 | M | 0 | OHM | 1/10W |
| R1026 | ERJ6GEYJ330 | M | 33 | OHM | J 1/10W | R1333 | ERJ6GEY0R00 | M | 0 | OHM | 1/10W |
| R1027 | ERJ6GEYJ391 | M | 390 | OHM | J 1/10W | R1335 | ERJ6GEYJ562 | M | 5.6K | OHM | J 1/10W |
| R1028 | ERJ6GEYJ391 | M | 390 | OHM | J 1/10W | R1336 | ERJ6GEYJ223 | M | 22K | OHM | J 1/10W |
| R1030 | ERJ8GCYJ102 | M | 1K | OHM | J 1/8W | R1337 | ERJ6GEYJ104 | M | 100K | OHM | J 1/10W |
| R1052 | ERDS2TJ102 | C | 1K | OHM | J 1/4W | R1338 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R1053 | ERDS1FJ330 | C | 33 | OHM | J 1/2W | R1339 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R1054 | ERDS2TJ224 | C | 220K | OHM | J 1/4W | R1340 | ERDS2TJ331 | C | 330 | OHM | J 1/4W |
| R1055 | ERJ6ENF1623 | M | 162K | OHM | F 1/10W | R1341 | ERDS1FJ682 | C | 6.8K | OHM | J 1/2W |
| R1056 | ERJ6ENF2212 | M | 22.1K | OHM | F 1/10W | R1355 | ERDS1FJ390 | C | 39 | OHM | J 1/2W |
| R1057 | ERJ8GCYJ102 | M | 1K | OHM | J 1/8W | R1361 | ERJ6GEYJ823 | M | 82K | OHM | J 1/10W |
| R1058 | ERQ14AJ101 | F | 100 | OHM | J 1/4W | R1364 | ER025CKF8662 | M | 86.6K | OHM | F 1/4W |
| R1060 | ERJ8GCYJ100 | M | 10 | OHM | J 1/8W | R1365 | ERDS2TJ185 | C | 1.8M | OHM | J 1/4W |
| R1061 | ERDS1FJ153 | C | 15K | OHM | J 1/2W | R1366 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R1101 | TAJADQ75ROFV | M | 75 | OHM | F 1/3W | R1368 | ERJ6GEYJ222 | M | 2.2K | OHM | J 1/10W |
| R1103 | ERJ6GEYJ330 | M | 33 | OHM | J 1/10W | R1382 | ERDS1FJ102 | C | 1K | OHM | J 1/2W |
| R1111 | TAJADQ75ROFV | M | 75 | OHM | F 1/3W | R1383 | ERJ6GEYJ392 | M | 3.9K | OHM | J 1/10W |
| R1113 | ERJ6GEYJ330 | M | 33 | OHM | J 1/10W | R1384 | ERJ6GEYJ682 | M | 6.8K | OHM | J 1/10W |
| R1121 | ERJ8GCY0R00 | M | 0 | OHM | 1/8W | R1385 | ERJ8GCYJ560 | M | 56 | OHM | J 1/8W |
| R1125 | ERJ8ENF75RO | M | 75 | OHM | F 1/8W | R1390 | ERJ6GEYJ153 | M | 15K | OHM | J 1/10W |
| R1126 | ERJ6GEYJ330 | M | 33 | OHM | J 1/10W | R1391 | ERDS1TJ225 | C | 2.2M | OHM | J 1/2W |
| R1127 | ERJ6GEYJ391 | M | 390 | OHM | J 1/10W | R1392 | ERJ6GEYJ472 | M | 4.7K | OHM | J 1/10W |
| R1128 | ERJ6GEYJ391 | M | 390 | OHM | J 1/10W | R1393 | ERJ6GEYJ152 | M | 1.5K | OHM | J 1/10W |
| R1130 | ERJ8GCYJ102 | M | 1K | OHM | J 1/8W | R1394 | ERJ6GEYJ392 | M | 3.9K | OHM | J 1/10W |
| R1152 | ERDS2TJ102 | C | 1K | OHM | J 1/4W | R1395 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R1153 | ERDS1FJ330 | C | 33 | OHM | J 1/2W | R1396 | ERDS1FJ224 | C | 220K | OHM | J 1/2W |
| R1154 | ERDS2TJ224 | C | 220K | OHM | J 1/4W | R1397 | ERDS1FJ332 | C | 3.3K | OHM | J 1/2W |
| R1155 | ERJ6ENF1623 | M | 162K | OHM | F 1/10W | R1399 | ERJ6GEYJ102 | M | 1K | OHM | J 1/10W |
| R1156 | ERJ6ENF2212 | M | 22.1K | OHM | F 1/10W | R1401 | ERDS2TJ330 | C | 33 | OHM | J 1/4W |
| R1157 | ERJ8GCYJ102 | M | 1K | OHM | J 1/8W | R1402 | ERJ6GEYJ562 | M | 5.6K | OHM | J 1/10W |
| R1158 | ERQ14AJ151 | F | 150 | OHM | J 1/4W | R1403 | ERJ6GEYJ152 | M | 1.5K | OHM | J 1/10W |
| R1160 | ERJ8GCYJ100 | M | 10 | OHM | J 1/8W | R1404 | ERJ6GEYJ182 | M | 1.8K | OHM | J 1/10W |
| R1161 | ERDS1FJ153 | C | 15K | OHM | J 1/2W | R1405 | ERJ6GEYJ105 | M | 1M | OHM | J 1/10W |
| R1201 | TAJADQ75ROFV | M | 75 | OHM | F 1/3W | R1406 | ERJ6GEYJ223 | M | 22K | OHM | J 1/10W |
| R1203 | ERJ6GEYJ330 | M | 33 | OHM | J 1/10W | R1407 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R1211 | TAJADQ75ROFV | M | 75 | OHM | F 1/3W | R1408 | ERJ6GEYJ103 | M | 10K | OHM | J 1/10W |
| R1213 | ERJ6GEYJ330 | M | 33 | OHM | J 1/10W | R1410 | ERJ6GEYJ222 | M | 2.2K | OHM | J 1/10W |
| R1221 | ERJ8GCY0R00 | M | 0 | OHM | 1/8W | R1412 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W |
| R1225 | ERJ8ENF75RO | M | 75 | OHM | F 1/8W | R1413 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W |
| R1226 | ERJ6GEYJ330 | M | 33 | OHM | J 1/10W | R1501 | ERJ6GEYJ473 | M | 47K | OHM | J 1/10W |
| R1227 | ERJ6GEYJ391 | M | 390 | OHM | J 1/10W | R1502 | ERJ6GEYJ473 | M | 47K | OHM | J 1/10W |
| R1228 | ERJ6GEYJ391 | M | 390 | OHM | J 1/10W | | | | | | |
| R1230 | ERJ8GCYJ102 | M | 1K | OHM | J 1/8W | | OTHERS | | | | |
| R1252 | ERDS2TJ102 | C | 1K | OHM | J 1/4W | | | | | | |
| R1253 | ERDS1FJ330 | C | 33 | OHM | J 1/2W | | TESA066 | CRT PCB HOLDER | | | |
| | | | | | | | TESA069 | SPRING(CRT EARTH) | | | |
| R1254 | ERDS2TJ224 | C | 220K | OHM | J 1/4W | | THEC0159 | SCREW(FOR CRT PCB HOLDER) | | | |
| R1255 | ERJ6ENF1623 | M | 162K | OHM | F 1/10W | | THE902N | D-SUB SCREW | | | |
| R1256 | ERJ6ENF2212 | M | 22.1K | OHM | F 1/10W | | THTF001 | SCREW(FOR IC/TR/D) | | | |
| R1257 | ERJ8GCYJ102 | M | 1K | OHM | J 1/8W | | | | | | |
| R1258 | ERQ14AJ121HK | F | 120 | OHM | J 1/4W | ⚠ | TMM81488 | CLAMPER | | | |
| | | | | | | | TUCC5435 | SHIELD PLATE(CRT PCB) | | | |
| R1260 | ERJ8GCYJ100 | M | 10 | OHM | J 1/8W | | TUCJ5218 | SHIELD CASE(CRT PCB) | | | |
| R1261 | ERDS1FJ153 | C | 15K | OHM | J 1/2W | | TUWF052 | BNC TERMINAL BRACKET | | | |
| R1315 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W | | TUWX052 | AC INLET BRACKET | | | |
| R1316 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W | | | | | | |
| R1320 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W | | TUXE109 | CRT PCB BRACKET | | | |
| | | | | | | | XTV3+10J | SCREW | | | |
| R1321 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W | | XTV3+8J | SCREW | | | |
| R1322 | ERJ6GEYJ101 | M | 100 | OHM | J 1/10W | CL1 | TUXX104 | WIRE CLIP | | | |
| R1323 | ERJ6GEYJ104 | M | 100K | OHM | J 1/10W | ⚠ F801 | XBA2C50TB15L | FUSE(5.0A) | | | |
| R1324 | ERJ6GEYJ561 | M | 560 | OHM | J 1/10W | | | | | | |
| R1325 | ERJ6ENF2372 | M | 23.7K | OHM | F 1/10W | FG2 | TJC85341 | EARTH LUG | | | |
| | | | | | | FG3 | TJC85341 | EARTH LUG | | | |
| R1326 | ERJ6ENF4021 | M | 4.02K | OHM | F 1/10W | FG4 | TJC85341 | EARTH LUG | | | |
| R1327 | ERJ6GEYJ221 | M | 220 | OHM | J 1/10W | FG5 | TJC85341 | EARTH LUG | | | |

| | Ref.No. | Part No. | Description | | Ref.No. | Part No. | Description |
|---|---|---|---|---|---|---|---|
| | FG6 | TJC85341 | EARTH LUG | | | | |
| | FG7 | TJC85341 | EARTH LUG | | | | |
| | FS801 | TJC85502T | FUSE HOLDER | | | | |
| | FS802 | TJC85502T | FUSE HOLDER | | | | |
| ⚠ | N11 | TJCD008 | 1P CONNECTOR | | | | |
| ⚠ | N100A | TJSF07816 | 16P CONNECTOR | | | | |
| ⚠ | N100B | TJSF07816 | 16P CONNECTOR | | | | |
| ⚠ | N102 | EMCS0451ML | 4P CONNECTOR(L-TYPE) | | | | |
| ⚠ | N110A | TJS9A8800 | 7P CONNECTOR(L-TYPE) | | | | |
| ⚠ | N110B | TJSF05207 | 7P CONNECTOR | | | | |
| ⚠ | N120 | TJSF36615 | 15P CONNECTOR(D-SUB) | | | | |
| ⚠ | N150A | TJSF08010 | 10P CONNECTOR | | | | |
| ⚠ | N150B | TJSF07910 | 10P CONNECTOR(L-TYPE) | | | | |
| ⚠ | N231 | TJSF25200 | BNC TERMINAL | | | | |
| ⚠ | N232 | TJSF25200 | BNC TERMINAL | | | | |
| | N651 | TJC85342T | LUG TERMINAL | | | | |
| ⚠ | N652 | TJCD008 | 1P CONNECTOR | | | | |
| ⚠ | N801 | TJS8A9361 | AC SOCKET | | | | |
| | N891 | TEL376 | OCTAL PIN | | | | |
| ⚠ | N951 | TJS118590 | 2P CONNECTOR | | | | |
| ⚠ | N1001 | TJSF25200 | BNC TERMINAL | | | | |
| ⚠ | N1004 | TJSC01400 | CRT SOCKET | | | | |
| | N1005 | TJC85342T | LUG TERMINAL | | | | |
| ⚠ | N1006 | TJCD008 | 1P CONNECTOR | | | | |
| | N1007 | TJC85342T | LUG TERMINAL | | | | |
| ⚠ | N1101 | TJSF25200 | BNC TERMINAL | | | | |
| ⚠ | N1201 | TJSF25200 | BNC TERMINAL | | | | |
| ⚠ | N1303A | TJSF38311 | IC SOCKET(11P) | | | | |
| | N501-2 | TEL376 | OCTAL PIN | | | | |
| | N501-3 | TEL376 | OCTAL PIN | | | | |
| | N510-1 | TEL376 | OCTAL PIN | | | | |
| | N510-2 | TEL376 | OCTAL PIN | | | | |
| | N510-3 | TEL376 | OCTAL PIN | | | | |
| | N510-4 | TEL376 | OCTAL PIN | | | | |
| | N901-1 | TEL376 | OCTAL PIN | | | | |
| | N901-2 | TEL376 | OCTAL PIN | | | | |
| ⚠ | PC821 | ON3171 | PHOTO COUPLER | | | | |
| ⚠ | PC822 | ON3171 | PHOTO COUPLER | | | | |
| ⚠ | PC823 | TLP722D4 | PHOTO COUPLER | | | | |
| ⚠ | RL901 | TSEH002O | RELAY | | | | |
| | S371 | TAGA0006 | SPARK GAP | | | | |
| | S671 | TAGDSP141T | SPARK GAP | | | | |
| | S910 | TAGDSP201MF | SPARK GAP | | | | |
| | S1051 | TAGDSP141T | SPARK GAP | | | | |
| | S1151 | TAGDSP141T | SPARK GAP | | | | |
| | S1251 | TAGDSP141T | SPARK GAP | | | | |
| | S1351 | TAGDSP141T | SPARK GAP | | | | |
| | S1355 | TAGDSP301N | SPARK GAP | | | | |
| | S1372 | TAGA0005 | SPARK GAP | | | | |
| | SG1001 | TJC85341 | EARTH LUG | | | | |
| | SG1002 | TJC85341 | EARTH LUG | | | | |
| | SG1003 | TJC85341 | EARTH LUG | | | | |
| | SG1004 | TJC85341 | EARTH LUG | | | | |
| | SW121 | EVQPB005K | SWITCH | | | | |
| | SW122 | EVQPB005K | SWITCH | | | | |
| | SW123 | EVQPB005K | SWITCH | | | | |
| | SW124 | EVQPB005K | SWITCH | | | | |
| ⚠ | SW801 | ESB91274A | SWITCH(POWER) | | | | |
| | TH801 | ERTB6SFL100P | THERMISTOR | | | | |
| ⚠ | TH901 | TAP114Q4R5 | POSISTOR | | | | |
| | X101 | TAAA0005 | CRYSTAL OSCILLATOR | | | | |

| | Ref.No. | Part No. | Description |
|---|---|---|---|
| | | | |
| | | | |
| | | CABINET & | |
| | | MAIN PARTS | |
| | 27 | TKKL5063 | LEAD PROTECTOR |
| | 28 | TUAA0850I | USB/PS PCB BRACKET |
| ⚠ | 29 | TMZX5005 | AC OUTLET CORD COVER |
| | 30 | TUCC0034 | SHIELD CASE(PS PCB) |
| | 31 | TUCC0035 | SHIELD CASE(USB PCB) |
| | | TUC87574 | AC INLET BRACKET |
| ⚠ | 32 | TBLB303701 | PEDESTAL |
| ⚠ | | TBMD469 | PEDESTAL MODEL NAME LABEL |
| ⚠ | | TMM76416 | CLAMPER |
| ⚠ | | TMM81487 | PUSH RIVET |
| ⚠ | | TMKE138 | BARRIER |
| ⚠ | 33 | TMK84990 | SET LEG |
| | | THTF002U | SCREW(FOR 1P TERMINAL) |
| | | XTB4+8F | SCREW |
| | | XTN5+16LY | SCREW |
| | | XTV3+8JFZ | SCREW |
| | | XYA4+EF8 | SCREW |
| ⚠ | 34 | TXANP2LD64A | PC BOARD W/COMPONENT (USB/PS) |
| ⚠ | 35 | TSXA125 | AC OUTLET CORD |
| ⚠ | | TSXX118 | 1P TERMINAL ASSY(BLACK) |
| ⚠ | | TXAJTC6P582 | 6P CONNECTOR ASSY |
| ⚠ | | TQFA772 | SPECIFICATION LABEL |
| | | TQF83825-6 | SERIAL NO. LABEL |
| ⚠ | | TQF86608 | EARTH CAUTION LABEL |
| | | I.C | |
| | IC5401 | KC82C160D | IC |
| | IC5801 | MIP0223SCL | IC |
| | IC5802 | TL431AIZ | IC |
| | | TRANSISTORS | |
| | Q5401 | XN5601 | TRANSISTOR |
| | Q5801 | 2SD1820AR | TRANSISTOR |
| | | DIODES | |
| | D5401 | MA4024LQZ | DIODE |
| | D5402 | MA111 | DIODE |
| | D5403 | DTZTT115R6B | DIODE |
| | D5404 | MA8036H | DIODE |
| | D5405 | MA8036H | DIODE |
| | D5406 | DTZTT115R6B | DIODE |
| | D5407 | MA8036H | DIODE |
| | D5408 | MA8036H | DIODE |
| | D5409 | DTZTT115R6B | DIODE |
| | D5410 | MA8036H | DIODE |
| | D5411 | MA8036H | DIODE |
| | D5412 | DTZTT115R6B | DIODE |
| | D5413 | MA8036H | DIODE |
| | D5414 | MA8036H | DIODE |
| | D5415 | DTZTT115R6B | DIODE |
| | D5416 | MA8036H | DIODE |
| | D5417 | MA8036H | DIODE |
| | D5425 | MA8036H | DIODE |
| | D5426 | MA8036H | DIODE |
| | D5427 | MA8036H | DIODE |
| | D5802 | EG01Z | DIODE |

| | Ref.No. | Part No. | Description |
|---|---|---|---|
| | D5803 | ERA34-10 | DIODE |
| | D5804 | FMBG14LLF659 | DIODE |
| | D5805 | MA8240M | DIODE |
| | D5806 | MA4075M | DIODE |
| ⚠ | D5807 | ERZVEAV431 | VARISTOR |
| | D5809 | MA111 | DIODE |
| | D5810 | MA111 | DIODE |
| | D5811 | EM01A | DIODE |
| | D5812 | EM01A | DIODE |
| | D5813 | EM01A | DIODE |
| | D5814 | EM01A | DIODE |
| | D5815 | MA4075M | DIODE |
| | | COIL & | |
| | | TRANSFORMERS | |
| | J5851 | TSK1008 | FERRITE CORE |
| | J5852 | TSK1008 | FERRITE CORE |
| | L5404 | EXCELDR35C | LC COMBINATION |
| | L5405 | TSKA157 | FERRITE CORE |
| | L5406 | TSKA157 | FERRITE CORE |
| | L5407 | EXCELDR35C | LC COMBINATION |
| | L5408 | EXCELDR35C | LC COMBINATION |
| | L5412 | EXCELDR35C | LC COMBINATION |
| | L5416 | EXCELDR35C | LC COMBINATION |
| | L5420 | EXCELDR35C | LC COMBINATION |
| ⚠ | L5801 | TLPD047 | LINE FILTER |
| | L5802 | TLUACNB4R7M | PEAKING COIL |
| | L5803 | TSK8042-1 | FERRITE CORE |
| | L5804 | TSK8042-1 | FERRITE CORE |
| ⚠ | T5801 | TLPA073 | POWER TRANSFORMER |
| | | CAPACITORS | |
| | C5401 | ECEA1AGE101 | E 100UF 10V |
| | C5402 | ECEA1EGE100 | E 10UF 25V |
| | C5403 | ECJ2VF1H104Z | C 0.1UF Z 50V |
| | C5404 | ECUX1H103KBG | C 0.01UF K 50V |
| | C5405 | ECUX1H180JCN | C 18PF J 50V |
| | C5406 | ECUX1H180JCN | C 18PF J 50V |
| | C5407 | ECJ2VF1H104Z | C 0.1UF Z 50V |
| | C5408 | ECJ2VF1H104Z | C 0.1UF Z 50V |
| | C5409 | TACBD1A151MT | E 150UF 10V |
| | C5410 | TACBD1A151MT | E 150UF 10V |
| | C5411 | TACBD1A151MT | E 150UF 10V |
| | C5412 | TACBD1A151MT | E 150UF 10V |
| | C5413 | ECEA1HGE010 | E 1UF 50V |
| | C5414 | ECEA1EGE100 | E 10UF 25V |
| | C5415 | ECJ2VF1H104Z | C 0.1UF Z 50V |
| | C5416 | ECJ2VF1H104Z | C 0.1UF Z 50V |
| | C5417 | ECEA1HGE0R1 | E 0.1UF 50V |
| | C5420 | ECUX1H103KBG | C 0.01UF K 50V |
| | C5421 | ECJ2VF1H104Z | C 0.1UF Z 50V |
| | C5422 | ECJ2VF1H104Z | C 0.1UF Z 50V |
| | C5423 | ECJ2VF1H104Z | C 0.1UF Z 50V |
| | C5424 | ECJ2VF1H104Z | C 0.1UF Z 50V |
| ⚠ | C5801 | ECQU2A104MNF | PP 0.1UF M 250V |
| ⚠ | C5802 | ECQU2A104MNF | PP 0.1UF M 250V |
| ⚠ | C5803 | ECKDRS332MEY | C 3300PF M |
| ⚠ | C5804 | ECKDRS332MEY | C 3300PF M |
| | C5805 | TACDV2G826MC | E 82UF 400V |
| | C5806 | ECKD2H392KB5 | C 3900PF K 500V |
| | C5807 | ECA1HHG470 | E 47UF 50V |
| | C5808 | ECA1HHG470 | E 47UF 50V |

| | Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|---|
| | C5809 | ECUX1C104KBX | C | 0.1UF | K | 16V |
| ! | C5810 | ECKDRS472MEY | C | 4700PF | M | |
| ! | C5811 | ECKDRS472MEY | C | 4700PF | M | |
| | C5812 | EEUFC1A102 | E | 1000UF | | 10V |
| | C5813 | EEUFC1C681 | E | 680UF | | 16V |
| | C5814 | EEUFC1A681 | E | 680UF | | 10V |
| | C5815 | ECUX1C104KBX | C | 0.1UF | K | 16V |
| | C5816 | ECA1AHG471 | E | 470UF | | 10V |
| | | RESISTORS | | | | |
| | L5409 | ERJ6GEY0R00 | M | 0 OHM | | 1/10W |
| | L5410 | ERJ6GEY0R00 | M | 0 OHM | | 1/10W |
| | L5413 | ERJ6GEY0R00 | M | 0 OHM | | 1/10W |
| | L5414 | ERJ6GEY0R00 | M | 0 OHM | | 1/10W |
| | L5417 | ERJ6GEY0R00 | M | 0 OHM | | 1/10W |
| | L5418 | ERJ6GEY0R00 | M | 0 OHM | | 1/10W |
| | L5421 | ERJ6GEY0R00 | M | 0 OHM | | 1/10W |
| | L5422 | ERJ6GEY0R00 | M | 0 OHM | | 1/10W |
| | R5401 | ERJ6GEYJ153 | M | 15K OHM | J | 1/10W |
| | R5402 | ERJ6GEYJ153 | M | 15K OHM | J | 1/10W |
| | R5403 | ERJ6GEYJ153 | M | 15K OHM | J | 1/10W |
| | R5404 | ERJ6GEYJ153 | M | 15K OHM | J | 1/10W |
| | R5405 | ERJ6GEYJ153 | M | 15K OHM | J | 1/10W |
| | R5406 | ERJ6GEYJ153 | M | 15K OHM | J | 1/10W |
| | R5407 | ERJ6GEYJ153 | M | 15K OHM | J | 1/10W |
| | R5408 | ERJ6GEYJ153 | M | 15K OHM | J | 1/10W |
| | R5409 | ERJ6GEYJ152 | M | 1.5K OHM | J | 1/10W |
| | R5410 | ERJ8GCYJ270 | M | 27 OHM | J | 1/8W |
| | R5411 | ERJ8GCYJ270 | M | 27 OHM | J | 1/8W |
| | R5412 | ERJ6GEYJ270 | M | 27 OHM | J | 1/10W |
| | R5413 | ERJ6GEYJ270 | M | 27 OHM | J | 1/10W |
| | R5414 | ERJ6GEYJ270 | M | 27 OHM | J | 1/10W |
| | R5415 | ERJ6GEYJ270 | M | 27 OHM | J | 1/10W |
| | R5416 | ERJ6GEYJ270 | M | 27 OHM | J | 1/10W |
| | R5417 | ERJ6GEYJ270 | M | 27 OHM | J | 1/10W |
| | R5418 | ERJ6GEYJ270 | M | 27 OHM | J | 1/10W |
| | R5419 | ERJ6GEYJ270 | M | 27 OHM | J | 1/10W |
| | R5420 | ERJ6GEYJ105 | M | 1M OHM | J | 1/10W |
| | R5421 | ERJ6GEYJ101 | M | 100 OHM | J | 1/10W |
| | R5423 | ERJ6GEYJ183 | M | 18K OHM | J | 1/10W |
| | R5424 | ERJ6GEYJ103 | M | 10K OHM | J | 1/10W |
| | R5425 | ERJ6GEYJ183 | M | 18K OHM | J | 1/10W |
| | R5426 | ERJ6GEYJ103 | M | 10K OHM | J | 1/10W |
| | R5427 | ERJ6GEYJ183 | M | 18K OHM | J | 1/10W |
| | R5428 | ERJ6GEYJ103 | M | 10K OHM | J | 1/10W |
| | R5429 | ERJ6GEYJ183 | M | 18K OHM | J | 1/10W |
| | R5430 | ERJ6GEYJ103 | M | 10K OHM | J | 1/10W |
| | R5432 | ERJ6GEYJ203 | M | 20K OHM | J | 1/10W |
| | R5433 | ERJ6GEYJ750 | M | 75 OHM | J | 1/10W |
| | R5434 | ERJ6GEYJ472 | M | 4.7K OHM | J | 1/10W |
| | R5436 | ERJ6GEYJ104 | M | 100K OHM | J | 1/10W |
| | R5437 | ERJ12YJ220 | M | 22 OHM | J | 1/2W |
| | R5438 | ERJ6GEYJ333 | M | 33K OHM | J | 1/10W |
| | R5439 | ERJ6GEYJ103 | M | 10K OHM | J | 1/10W |
| | R5440 | ERJ6GEYJ103 | M | 10K OHM | J | 1/10W |
| | R5801 | ERC12AGK394 | S | 390K OHM | K | 1/2W |
| | R5802 | ERG3FJ473 | M | 47K OHM | J | 3W |
| | R5803 | ERJ12YK6R8 | M | 6.8 OHM | K | 1/2W |
| | R5804 | ERJ6GEYJ150 | M | 15 OHM | J | 1/10W |
| | R5805 | ERJ8GCY0R00 | M | 0 OHM | | 1/8W |
| | R5807 | ERJ6GEYJ151 | M | 150 OHM | J | 1/10W |
| | R5808 | ERJ6ENF3001 | M | 3K OHM | F | 1/10W |
| | R5809 | ERJ6GEYJ222 | M | 2.2K OHM | J | 1/10W |
| | R5810 | ERJ6ENF3001 | M | 3K OHM | F | 1/10W |
| | R5811 | ERJ6GEYJ103 | M | 10K OHM | J | 1/10W |
| | R5812 | ERJ6GEYJ684 | M | 680K OHM | J | 1/10W |
| | | OTHERS | | | | |
| | F5401 | TSEX0007 | POLYMER FUSE | | | |
| | F5402 | TSEX0007 | POLYMER FUSE | | | |
| | F5403 | TSEX0007 | POLYMER FUSE | | | |
| | F5404 | TSEX0007 | POLYMER FUSE | | | |
| ⚠ | F5801 | XBA2C31TB15L | FUSE(3.15A) | | | |
| ⚠ | F5802 | XBA2C31TB15L | FUSE(3.15A) | | | |
| | FG5401 | TJC85341 | EARTH LUG | | | |
| | FG5402 | TJC85341 | EARTH LUG | | | |
| | FG5801 | TJC85341 | EARTH LUG | | | |
| | FS5801 | TJC85502T | FUSE HOLDER | | | |
| | FS5802 | TJC85502T | FUSE HOLDER | | | |
| | FS5803 | TJC85502T | FUSE HOLDER | | | |
| | FS5804 | TJC85502T | FUSE HOLDER | | | |
| ⚠ | N5401 | TJSF37604 | 4P CONNECTOR(USB) | | | |
| ⚠ | N5402 | TJSF39604 | 4P CONNECTOR(USB) | | | |
| ⚠ | N5403 | TJSF39604 | 4P CONNECTOR(USB) | | | |
| ⚠ | N5404 | TJSF39604 | 4P CONNECTOR(USB) | | | |
| ⚠ | N5405 | TJSF39604 | 4P CONNECTOR(USB) | | | |
| ⚠ | N5407 | EMCS0664M | 6P CONNECTOR | | | |
| ⚠ | N5801 | TJS8A9361 | AC SOCKET | | | |
| ⚠ | N5802 | EMCS0664M | 6P CONNECTOR | | | |
| ⚠ | N5803 | TJS9A9920 | 3P CONNECTOR(L-TYPE) | | | |
| ⚠ | PC5801 | ON3171 | PHOTO COUPLER | | | |
| | TH5801 | ERTD4FFL100P | THERMISTOR | | | |
| | X5401 | TSSA100 | CRYSTAL OSCILLATOR | | | |